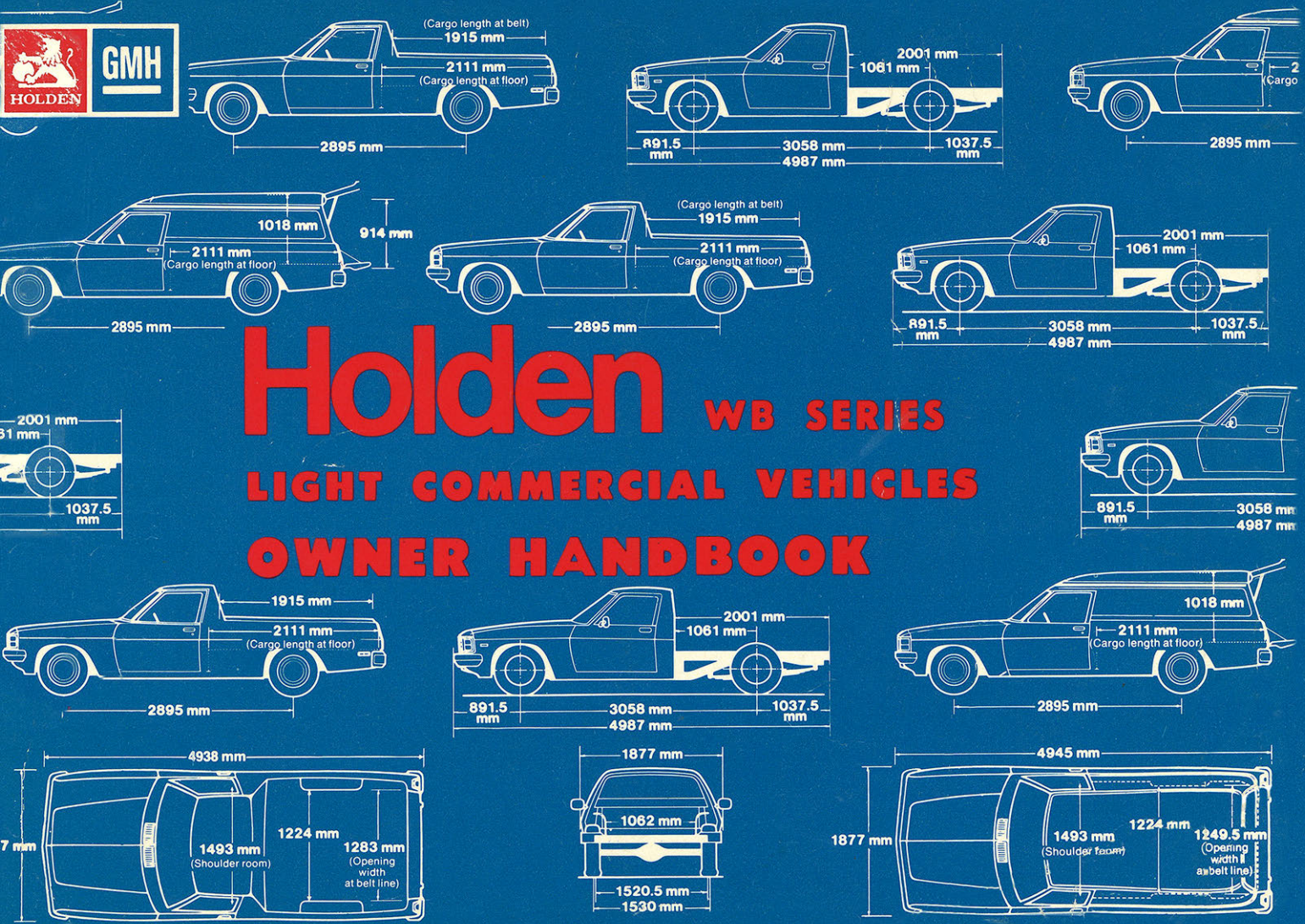

GMH
HOLDEN
(Cargo length at belt)
1915 mm
2111 mm
(Cargo length at floor)
2895 mm
2001 mm
1061 mm
891.5 mm
3058 mm
4987 mm
1037.5 mm
1018 mm
914 mm
Holden
WB SERIES
LIGHT COMMERCIAL VEHICLES
OWNER HANDBOOK
4938 mm
1493 mm
(Shoulder room)
1224 mm
1283 mm
(Opening width at belt line)
1877 mm
1062 mm
1520.5 mm
1530 mm
4945 mm
1249.5 mm

Part No. 92014507

Vehicle Identification Certificate

Owner's Name Mr. Mrs. Miss .....

Address .....

Town .....

State & Postcode .....

Reg. No. .....

Model Name .....

V.I.N. .....

Eng. No. .....

Odometer Reading .....

Selling Dealer's Stamp & Signature .....

Date of Acquistion .....

Refer to page 103 for Pre-Delivery Check and Page 104 for Delivery Certificate.

REPRINTED NOVEMBER 1982

Message from GMH

Thank you for choosing Holden. Your new Vehicle is the product of many years research and planning. We are very pleased and proud of the result — as we are sure you will be. To understand your new vehicle fully, please take the time to read through this handbook and keep it in the vehicle at all times for quick reference.

Full understanding of your vehicle's performance, warranty and maintenance procedures will add greatly to your enjoyment. On behalf of all here at GMH, may we wish you and your Vehicle many years of happy motoring.

This handbook contains important information necessary for the good performance and maintenance of the vehicle. Please leave it in the vehicle at the time of resale to assist the new owner.

GMH

New Vehicle Warranty

GENERAL MOTORS-HOLDEN'S SALES PTY. LIMITED
(Incorporated in Victoria)

New Vehicle Warranty

GENERAL MOTORS-HOLDEN'S SALES PTY. LTD. HEREBY WARRANTS THAT IT WILL MAKE GOOD, WITHOUT CHARGE, ANY DEFECT WHICH APPEARS IN THE VEHICLE IDENTIFIED IN THE VEHICLE IDENTIFICATION CERTIFICATE FOUND ON THE INSIDE OF THE FRONT COVER

Provided

1. the defect has been notified to an authorised GMH Dealer or Service Dealer:
   (a) before the vehicle has travelled a distance of 20,000 km, or:
   (b) within 12 months of the date of delivery of the vehicle to the first retail purchaser (or in the case of a Demonstrator vehicle within 12 months of the date when it was first placed into service by the Dealer)
   whichever comes first, and
2. the vehicle has been returned to an authorised GMH Dealer or Service Dealer

And

3. the Dealer has determined that the defect complained of *is* one of material or workmanship and *is not* caused by:
   (a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc. or by neglect
   (b) operation of the vehicle after it is known to be defective
   (c) accident or deliberate act
   (d) atmospheric fallout or flood, hail, salt, etc.
   (e) failure to carry out proper maintenance service
   (f) alteration or modification of the vehicle
   (g) the fitting of parts or accessories not marketed by GMH
   (h) any work carried out on the vehicle by someone other than an authorised GMH Dealer or Service Dealer,

BY THE DEALER (or as otherwise decided by GMH Sales) MAKING GOOD THE DEFECT BY REPAIR OR, AT THE OPTION OF GMH SALES, BY REPLACEMENT.

Excluded from this Warranty are

- defects in tyres or tubes (these being warranted by their manufacturers), and services such as engine tuning, brake adjustment, replacement of air and oil filters, etc. which are required as part of normal vehicle maintenance.

This Warranty applies only to vehicles operated in Australia and is given to the person who is entitled to possession of the vehicle whether as owner, lessee or otherwise and is given in addition to all rights conferred by law on that person.

Owners of vehicles operated outside Australia should consult their local dealer regarding the warranty applicable to their vehicles.

Notice to Customers

No GMH dealer or other person is authorised or permitted to give or make any statement assertion or undertaking in relation to the quality performance characteristics descriptions or fitness for any purpose of any GMH product or in connection with the supply of any GMH product, which is at variance with any written statement assertion or undertaking on any of these subjects given or made by General Motors-Holden's Limited or General Motors-Holden's Sales Pty. Ltd. in its published sales literature, and neither company accepts any liability for any such unauthorised action.

General Motors-Holden's Limited and General Motors-Holden's Sales Pty. Ltd. have franchised dealers in many parts of Australia for the sale of service parts and the provision of service to owners of GMH's products. Every endeavour is made to ensure that such dealers carry adequate stocks of service parts, and are equipped to provide satisfactory service, but neither General Motors-Holden's Ltd. nor General Motors-Holden's Sales Pty. Ltd. makes any promise that such parts or service facilities will be available, or available at any specific location or any particular time.

GMH Parts and Accessories Warranty

General Motors-Holden's Limited warrants in respect of GMH parts and accessories required as replacement parts, that it will make good by repair or at its option by replacement any defect occurring in any such GMH parts and accessories within 3 months from the date of acquisition or in the case of a GMH part or accessory which has been installed in a vehicle by a GMH Dealer or Service Dealer before such vehicle has travelled a distance of 6,500 kms from the date of installation, whichever first occurs.

Table of Contents

Index Page 130

This handbook applies to all WB Holden Commercial vehicles, and explains all equipment including options. Therefore you may find some equipment not installed on your vehicle.

Section 1: Getting to know your Holden Running In, Fuel Economy Tips, Safety Checklist, Keys and Locks, Mirrors, Windows, Seats, Seat Belts. 1

Section 2: Starting and Operating Steering Column Controls, Starting and Driving, Transmission Controls, Floor Controls, Parking Brake, Instrument Panel Controls and Dials, Ventilation, Air Conditioning.

Section 3: Emergencies, Safety and Emission Spare Wheel Storage, Wheel Changing, Overheating, Towing, Loading, Push Starting, Starting with Jumper Lead, Emission Control Systems.

Section 4: Owner Relations and Authorised GMH Dealers Owner Relations, Owner Relations Managers, Authorised GMH Dealers.

Section 5: Specifications Serial Numbers, Model Identification , Vehicle Dimensions, Engine Data, Capacities, Clearance and Settings, Fuses, Headlamps and Bulbs.

Section 6: Appearance, Maintenance and Service Caring for your vehicle, Washing Tips, Interior Cleaning, Service and Maintenance, Oil, Cooling System, Lubricants, Tyres, Owners' Responsibility, Guardian Maintenance Plan, Service Operations, Labour Times.

For proper maintenance of your vehicle use only General Motors parts, which are identified by one of these trademarks. When it comes to servicing, remember that a GMH Dealer has the trained personnel and specialised equipment to correctly service your vehicle.

All illustrations and specifications contained in this handbook are based on the latest product information available at time of publication approval. The right is reserved to make changes, at any time, without notice, in prices, colours, materials, equipment, specifications and models, and to discontinue models. Check with your Holden Dealer for complete information.

Section 1: Getting to Know your Holden

Running In

These days, there's no need to follow a rigid running-in schedule. However, if you observe a few simple points during the first few hundred kilometres of driving, you will add to the vehicle's future performance and economy.

For the first 500 kilometres, don't go over 80 km/h. Up to 1500 kilometres, avoid driving at any one speed — either slow or fast — for any length of time.

Include some higher speeds in your driving. This helps prolong the life of parts and helps with fuel and oil economy. But never drive at high speed until the engine is thoroughly warm.

Full throttle acceleration is not recommended before the car has done 3000 kilometres.

For the first 500 kilometres, heavy braking should be avoided, except in the case of emergency, since brake misuse during this period could impair future braking efficiency.

Fuel Economy Tips

How you drive, and where you drive have an effect on your fuel economy. The following pointers will help reduce your fuel bill.

Avoid:

Hard Acceleration.

Excess Loading Weight.

Stop-Start Driving. Plan your trips ahead.

Excessive Speed. You will save on your fuel bill by driving at 80 km/h instead of 110 km/h.

ENGINE IDLING:
If you have to wait for more than a few minutes, turning off the engine will conserve fuel.

HARD DRIVING IN BUILT UP AREAS:
Energy is wasted as heat when braking. Hard driving up to stopping points is wasting fuel, as energy in the form of fuel is needed to accelerate again.

AIR CONDITIONER OPERATION:
By using the vent setting, most of the advantages of the integrated air conditioning system can be obtained in cool and moderate temperature conditions while at the same time using the least amount of engine power.

Check:

Air Cleaner Element. A dirty air cleaner element reduces engine efficiency. Replace it at the required intervals.

Engine Tuning. An out of tune engine cannot give good fuel economy.

Tyre Inflation. Under inflation wastes fuel.

Wheel Alignment. Incorrect alignment makes the front wheels drag and puts an extra load on your engine.

Safety Checklist

Follow these simple steps before driving your new Holden. They will help make your motoring safer and more enjoyable.

Before getting in

Check that the windows, mirrors and lights are clean.

Check the tyre inflation.

If you intend to reverse, check that the area behind you is clear.

Before driving off

Be sure you understand your vehicle and know how to operate it safely.

Close and lock all doors.

Position your seat for comfortable driving.

Adjust both rear vision mirrors.

FASTEN SEAT BELTS.

Check that the warning indicators light up when you turn the key to start the engine.

Release the parking brake.

Caution: Never leave loose articles inside the car — they may become dangerous projectiles if you have a collision or stop suddenly.

Maintenance for safety

The following items require regular attention in the interests of safety. If anything goes wrong with any one of them, an authorised GMH Dealer will help you.

- BRAKES.
- HORN.
- ALL LIGHTS.
- REAR VISION MIRRORS.
- SEAT BELTS.
- GLASS AREAS.
- EXHAUST SYSTEM.
- STEERING & WHEEL ALIGNMENT.
- WINDSHIELD WIPERS & WASHERS.
- TYRES.
- SUSPENSION.

Safe Driving Hints

Important

These items are listed as a safety reminder to you. The appropriate section of this handbook should be referred to for a more detailed explanation.

Carbon Monoxide

Avoid inhaling exhaust gases because they contain carbon monoxide, which is colourless and odourless. Carbon monoxide is a dangerous gas that can cause unconsciousness and is potentially lethal.

Seat Belts

Various road laws require the wearing of seat belts. It is important that the habit of using these should be developed by yourself and others in the vehicle. In the interest of safety seat belts should be checked regularly. Your Dealer will inspect and check the belts for you as part of the normal Guardian Maintenance Service. Never attempt to modify or change the seat belt away from the original specification as this will affect the operation of the belts and reduce their effectiveness, in preventing injury, in an accident.

Anti-Theft Ignition Steering Lock

DO NOT turn the ignition switch away from the ON position while the vehicle is in motion as this renders ineffective any power assisted equipment fitted to you vehicle.

Never remove the key while the vehicle is in motion **as this will lock the steering of the vehicle and render it inoperative.**

Brakes

Driving through water may affect performance. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with an assured clear distance ahead until brake performance returns to normal.

Brake pedal travel should not be obstructed by improper floor mats or other interfering material under the pedal.

Power Assisted Brake

Power assisted brakes which are fitted to your vehicle utilise vacuum from the engine when it is running. Do not let the vehicle run down steep grades without the engine running. Do not coast with the engine switched off.

Tyre Traction

A decrease in driving, cornering, and braking traction occurs when water, snow, ice, gravel, or other material is on the road surface. Driving practices and vehicle speed should be adjusted to the road conditions.

Cooling System

If the cooling system is hot, the radiator cap must not be removed quickly — it should be rotated slowly to the first stop, which permits the pressure to release slowly through the overflow pipe. It is advisable to cover the cap, with an old rag or cloth to avoid possible scalding.

Loose Articles

Do not leave a loose load or articles inside the passenger compartment. Stow articles in the load compartment and tie down if necessary.

Petrol Fumes

Always stop the engine and do not smoke or allow open flames or sparks near the vehicle when refuelling. If petrol fumes are noticed while driving, the cause should be determined and corrected without delay.

Keys and Locks

Your vehicle is fitted with a two key locking system which provides security for personal valuables when parking in car parks or similar areas where locking of the vehicle is not permitted.

Master Key

Master key (plastic head) is retained by the driver and operates all locks on the vehicle.

Service Key

Service key (square head) is left with the vehicle when it is parked in those areas described above and only operates the door locks and ignition switch which enables the vehicle to be moved if required but does not allow entry to the glove compartment.

Opening Doors

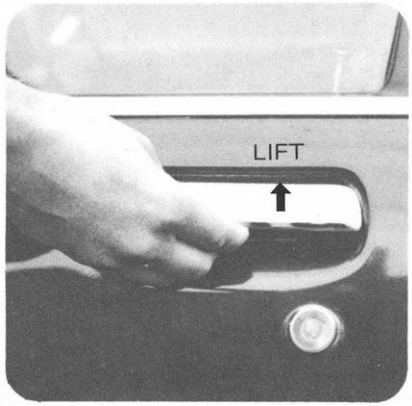
Both front doors can be unlocked with the key from the outside by turning the key to the right, before lifting the handle to open the door.

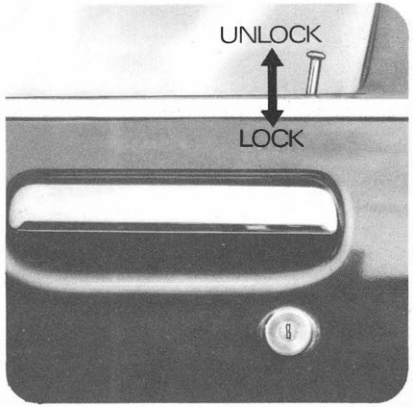
Note: Doors have a free-wheeling lock mechanism. This means that the doors cannot be opened from the outside or inside unless the locking button is raised.

Locking Doors

Inside — To lock, push down the locking button in the door sill. To unlock lift the button.

Outside — With the door open, push down the inside locking button then shut the door. Do not slam the door or push the window areas.





Fuel Cap Lock

Where a locking type fuel cap is fitted, two keys are provided, one being a spare.

Glove compartment

To lock, insert the key, rotate clockwise one half of a turn and then withdraw.

To unlock, insert the key and rotate anti-clockwise one half of a turn.

To open pull towards you. To close, push lid firmly back into place. This will engage the catch.

Panel Van End-Gate

The upper end-gate must first be unlocked by turning the key in the lockable T-handle, anti-clockwise and then turning the handle in the same direction. The upper end-gate may then be swung up and will be supported when the safety catches engage in their respective sliding extension arms. The lower end-gate may then be opened by moving the actuating lever, which is centrally placed at the upper inside edge of the end-gate across to left hand side (passenger's side). The lower end-gate is supported in the lowered position by two cables.

To close the end-gates, reverse the procedure by first raising the lower end-gate to within a small distance of the fully closed position and then use a quick firm pushing action to engage the locking tongues on each side. With one hand taking the weight of the upper end-gate, snap forward each of the safety catches on the supporting arms before lowering to within a small distance of the closed position and then shutting with a quick, firm pushing action. The T-handle may then be locked by turning the key clockwise.

The key code number is stamped on the PLASTIC KEY HEAD. Before placing the key on your key ring, record the code number and place it in a safe place so that if the key is lost duplicates can be ordered from any GMH Dealer by quoting the key code number.

CAUTION: To prevent entry of dangerous exhaust fumes into the passenger compartment, the end gate on Panel Vans should be closed during vehicle operation. However, if it is necessary to leave the end gate open while transporting bulky cargo, all windows must be closed to avoid vacuum build-up. Open fresh air heater vents and switch, if necessary, to a higher blower speed.

A Hint

Door locks may ice up in cold weather. If this happens, warm the key before you insert it. You may have to do this several times.

Utility End-Gate

The end-gate on utility models may be unlocked by simply moving the actuating lever, which is centrally placed at the upper inside edge of the end-gate, across to the kerb left hand side (passenger's side). The end-gate is supported in the lowered position by two cables.

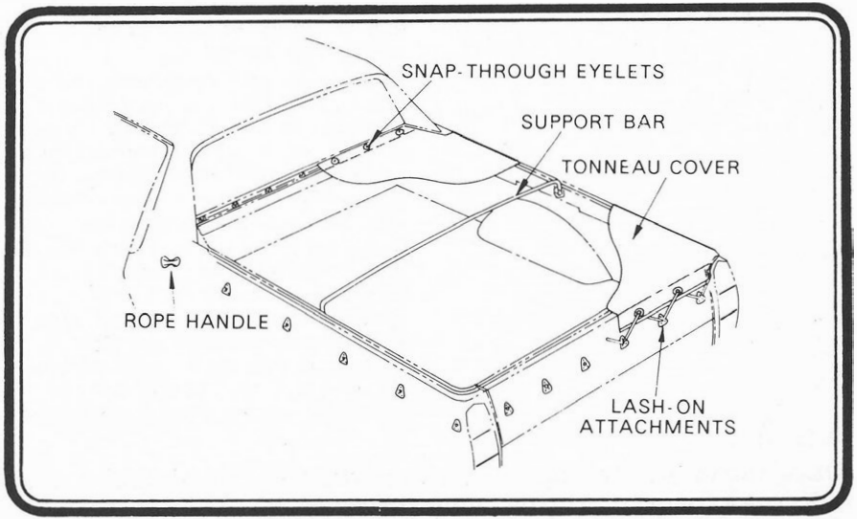
When closing the end-gate, lift to within a small distance of the closed position, before using a quick, firm pushing action to engage the locking tongues on either side.

Utility Lash-On Tonneau Cover (where fitted)

This cover is attached by two methods.

The front end of the cover is attached by a series of snap-through eyelets which are situated along the ledge at the bottom of the cabin rear window. The advantage of these clips is that the tonneau cover can be unlashed and folded under the ledge while not actually needing complete detachment: also re-covering the storage area is made easier when it is attached at one end to start with.

The other means of attachment around the remaining three sides is by the alternate lashing by rope, between the cover eyelets and the plastic hooks, the hooks being positioned along the sides of the cargo area and across the end-gate. Rope handles are provided at the front of each side for tying down the ends of the lashing rope.



Seat Belts

Study this section carefully. It is important that you understand how to correctly wear a seat belt. You should also ensure that all occupants wear a properly adjusted seat belt whenever the vehicle is moving.

Retractor Belts

To put on a retractor seat belt, pull the metal tongue across your body and clip it into the buckle. When the metal tongue has locked safely into place you will hear a "click". After fastening, settle the belt by running your hand under the belt starting at the hip, go across to the buckle, then up under the sash. Any extra belt length will retract automatically.

The lap section should be worn **as low as possible on your hips**, not on your waist. Make sure the sash and lap sections of the seat belt are free from twists and are fitting firmly.

Any extra belt length should retract automatically when you run your hand under it.

The emergency — locking retractor belt allows you to move freely while the vehicle is travelling normally. The belt will lock immediately on fast braking, impact with a solid object or any quick action.

To release all belts: press the release button on the buckle and allow the belt to retract. Check that it fully retracts without twisting or turning.

Warning: The positioning of the tongue restrictor must never interfere with or stop the belt from fully retracting.

Lap-Type Belts

To Adjust: Settle yourself comfortably. Bring the tongue adjuster across your body and clip it into the buckle. When the metal tongue has locked safely into place you will hear a "click". Make sure the belt is fitting firmly across the lower hip area and not across your waist.

To Shorten: Tilt the tongue adjuster and pull the belt through the belt adjuster.

To Lengthen: Tilt the tongue adjuster and pull the belt from just below the finger grip bar.

Belt Storage

When not in use keep the lap belt fastened.

Safety Hints

Check seat belts regularly. Your GMH Dealer will do this as part of normal Guardian Maintenance.

Adjust seat belts firmly. A loose belt is no help at all. Seat belts must be

replaced if they have been in use during a severe impact — even if there's no obvious damage.

Don't wear a belt with twisted straps.

Don't ever put a seat belt around a child being nursed on the lap.

Care of Seat Belts

Clean belts only with a solution of mild soap and lukewarm water. Never use bleach. Replace the belts if they become frayed or damaged.

AUSTRALIAN DESIGN RULES: WARNINGS

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis, or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

Belts should not be worn with straps twisted.

Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

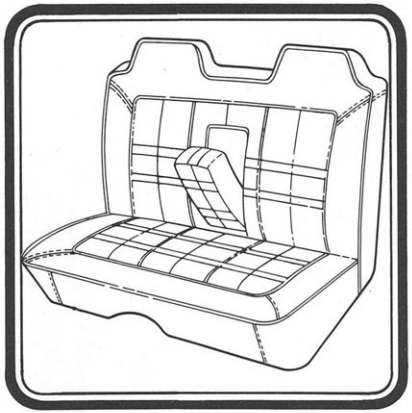
No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

The positioning of the tongue restrictor must never interfere with or stop the belt from fully retracting.

Seat Adjustment

Bench Seat

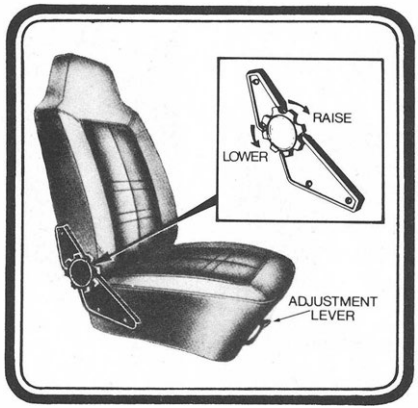
This seat can be unlocked at the front by moving the locking lever (positioned at the lower front right hand corner) across to the right, then apply body pressure to move the seat either backward or forward as required. The seat mechanism will lock again when the locking lever is released. To check that the locks have fully engaged, try to move the seat backwards or forwards.



Bucket Seats

Front-Rear Control

Each bucket seat has a forward and backward adjustment control. The adjustment control lever is located on the lower front inner corner of the seat. Move the lever upward to unlock the adjustment catch. To check that the locks have fully engaged try to move the seat backward and forward.



Reclining Back Control

The reclining mechanism is controlled by a large toothed wheel on the outer side of the seat, located at the bottom of the seat back.

By turning the wheel, the reclining position of the seat can be changed as desired. The seat back will move in the same direction as the top of the wheel.

Adjustable Head-Restraint (where fitted)

This safety feature is not intended to be used as a headrest. It is solely for the reduction of possible injury that may result from a whip-lash neck movement following a vehicle collision. Adjust the restraint to have the centre line as close as possible to the height of your eyes NOT of your neck.

Rear Vision Mirrors

Inside Mirror

This is shatter-resistant, and mounted in such a way that it can be knocked out in case of accident. This lowers the chance of injury.

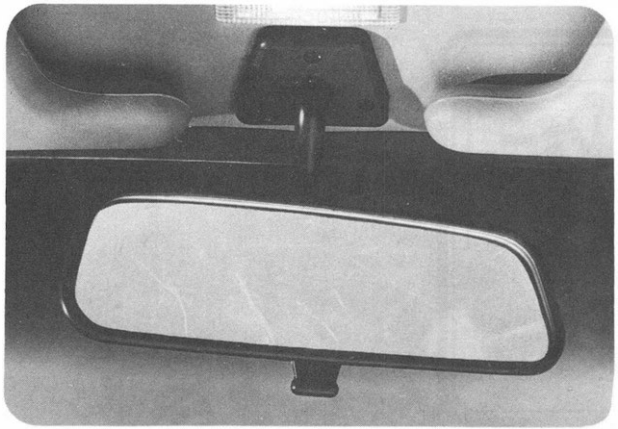
Anti-Glare Type

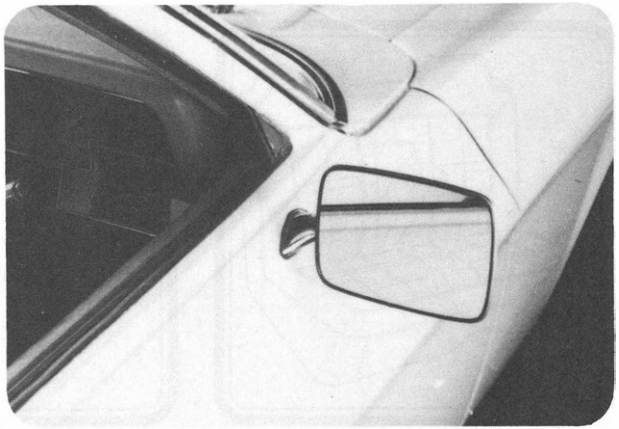
Where the anti-glare mirror is fitted, a control lever on the lower edge of the mirror enables an anti-glare reflector to be used during night driving. This reduces headlamp glare from following vehicles.

During normal daylight operation, the lever should be set forward. To reduce glare at night, move the lever backwards.

Outside Mirror

These are mounted on the outside of both the drivers and passengers doors to enable you to observe traffic in the next lanes. These mirrors must be adjusted for vertical and horizontal positions so that the driver when seated in the normal driving position can observe the traffic.





EXHAUST GAS WARNING
Carbon Monoxide Poisoning

Exhaust gases contain carbon monoxide which can cause unconsciousness and even death.

You could breathe the gases in if the exhaust system on your vehicle is faulty.

Have the vehicle checked thoroughly each time it is serviced. If you notice a change in exhaust noise, or if the back of your vehicle is damaged, take it to your GMH dealer for inspection.

If you must drive with a faulty exhaust, drive with all the windows open.

Danger

Don't ever sit in a parked vehicle with the engine running for any length of time. And don't leave the kids in there either.

Don't run the engine in the garage any more than necessary to move the vehicle.

If you must travel with the end-gate open, close all windows, fully open the ventilation system and do not exceed 50 km/h unless necessary.

Exhaust Pollution

Your vehicle is equipped with several features designed to minimise exhaust pollution.

Starting and Driving

The following suggestions are for starting and driving and should be followed if you are to get the best out of your vehicle.

Parking Brake
This should be firmly applied, and released only after you have started up.

Manual Transmission
Press the clutch in and check that the car is in Neutral.

Automatic Transmission
Check that the selector lever is in either N or P. The engine will not start if it is in any other position.

Engine

Cold Starting
Your Holden engine has an automatic choke system.

Before starting a cold engine, press the accelerator pedal slowly to the floor and completely release it again. This action sets the choke system for starting. Turn the ignition key to the START position until the engine is started. If the engine fails to start within a few seconds, turn the key to the OFF position then depress and release the accelerator pedal before turning the ignition key to the START position again. Release the key when the engine is started. If the vehicle has been standing for several days, it may be necessary to repeat this procedure a few times until the engine starts. After the engine has started, allow it to run at fast idle for at least 10 seconds before engaging gears. Do not KICK DOWN, i.e. do not depress the accelerator pedal in an attempt to lower the engine idle speed. While the engine is running, the automatic choke gradually moves to the off position as the engine reaches normal operating temperature.
In temperatures below 0°C, let the engine run at fast idle in NEUTRAL for about one minute. Without touching the accelerator pedal, put the automatic transmission into DRIVE and wait for a few seconds for the engine to steady itself before driving away.

Flooding
Pumping the accelerator can cause flooding which will prevent the engine from starting.
If this occurs, press the accelerator down to the floor and hold it there while holding the key in the START position. When the engine starts, allow the accelerator pedal to come up slowly.

Warm Starting
During summer, or when your engine is warm, the choke system operates only briefly — if at all.

To start — press the accelerator halfway to the floor and hold it in this position, then turn the key to START.

Idle the engine in Neutral for about 30 seconds before driving off.

Initial Driving

MANUAL TRANSMISSION:
Depress the clutch pedal and place the gear shift lever into the first or the reverse gear position. Release the parking brake. Lightly depress the accelerator pedal to increase the engine speed and slowly release the clutch pedal to set the vehicle in motion.

AUTOMATIC TRANSMISSION:
Depress the main brake pedal and release the parking brake. Place the gear selector lever into the DRIVE or REVERSE position. Release the brake pedal. Lightly depress the accelerator pedal to set the vehicle in motion.

Steering Column Controls

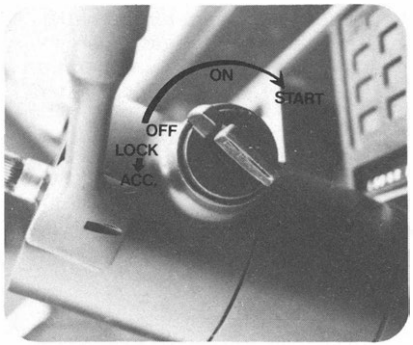
Ignition Lock

This is an anti-theft lock and is on the right side of the steering column. It has five positions.

ACC (1st Back from Lock) — Permits operation of accessories when the engine is not running. To engage, push the key in and turn toward you (counterclockwise).

LOCK (Normal Parking Position) — Locks the ignition when the key is removed and provides an added theft protection by preventing operation of the steering wheel.

OFF (1st Forward from Lock) — Permits turning the engine off without locking the steering wheel.



ON (2nd Forward from Lock) — Normal operating position. The ignition circuit and the electrically operated instruments are energised.

START (3rd Forward from Lock) — This starts the engine.

CAUTION: Do not turn the ignition switch away from the "ON" position while the vehicle is in motion as this renders ineffective any power assisted equipment.

Never remove the key while the vehicle is in motion as this will lock the steering of the vehicle.

Horn

The horn is operated by pressing the bar, which is situated across the steering wheel. The horn can be operated at any time.

PARKING: When leaving your vehicle unattended:

1. Apply the parking brake. (Refer to page 25).
2. Place transmission selector in:
   Reverse — Manual Trans.
   Park — Automatic Trans.
3. Turn key to LOCK position.
4. Remove key.
5. Lock all doors and windows.

NOTE: If the steering lock is difficult to disengage when the vehicle has been parked with the tyres hard up against the kerb or with the steering wheel off-centre it may be necessary to rotate the steering wheel to free up the ignition steering lock.

Power Steering (where fitted)

This system has been designed to reduce steering effort. It uses hydraulic pressure to lighten steering loads and is designed so that "road feel" is retained. Care should be taken not to hold a turning force on the steering wheel when stationary (i.e. when waiting before turning a corner, etc.) as this may affect the system, due to the fluid becoming overheated.

CAUTION: Power Steering assistance is provided by a hydraulic pump driven by the engine. The power steering is rendered ineffective when the engine is not running, if the power steering pump drive belt breaks or if the pump reservoir is empty of fluid.
Do not drive the vehicle under these conditions.

Combination Stalk

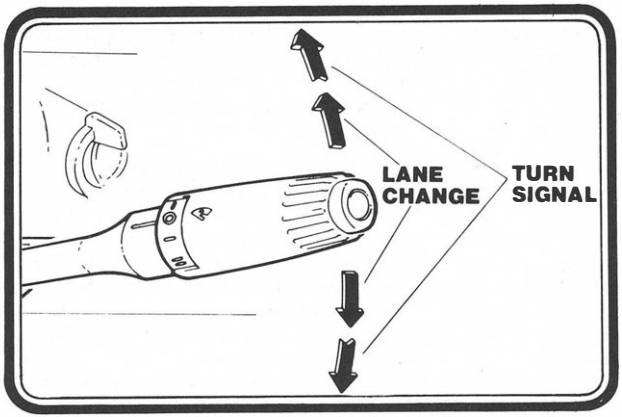
Turn Signals

These operate when the ignition switch is in the ON position.

When the combination stalk is moved up or down, a turn signal light on the instrument panel will flash, indicating the direction intended to turn. The signal cancels when the steering wheel is returned to normal. If the turn signal lights don't flash or if you can't hear the clicking signal, or if they flash faster, or slower than usual, have them checked right away, in the interest of your safety.

Lane Change

By using the two-stage operation it is possible to signal lane changing by exerting slight finger pressure on the stalk in the direction you intended moving. On release of the finger pressure the stalk will return to the neutral position.



Windshield Wipers and Washers

The wiper and washer mechanisms operate when the ignition switch is in either the ON or ACC positions.

Wiper Operation — The windshield wipers are operated by turning the end of the stalk clockwise from the O position:

— position for slow wiper speed.

= position for fast wiper speed.

An extra position is provided which operates the wipers for a single sweep only. From the O position turn the stalk anti-clockwise to the 1 position and release. The stalk will then return to the O position and the wipers will sweep once across the windshield and return to their rest position.

Washer Operation — By depressing the button on the end of the stalk the electric washer pump is activated, spraying jets of fluid onto the area swept by the wiper blades, and will only continue while the button is depressed. If the windshield wipers are not in operation at the time, depressing the stalk will automatically start them operating.

Wiper Dwell Control

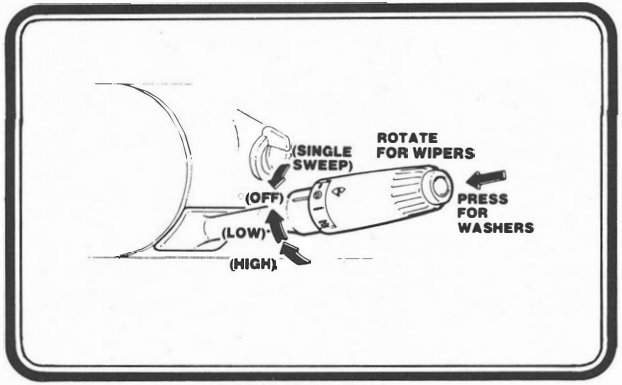
The dwell control can be operated by turning the knob on the instrument panel in a clockwise direction which progressively increases the dwell period between wiper blade sweeps.

Dwell Control (where fitted). Refer to page 29.

Hazard Warning Switch

This is the knob on the passenger side of steering column. When stopped in an emergency situation, push the knob in. This makes all four indicator lights flash continuously and both turn indicators on the instrument panel will flash when on.

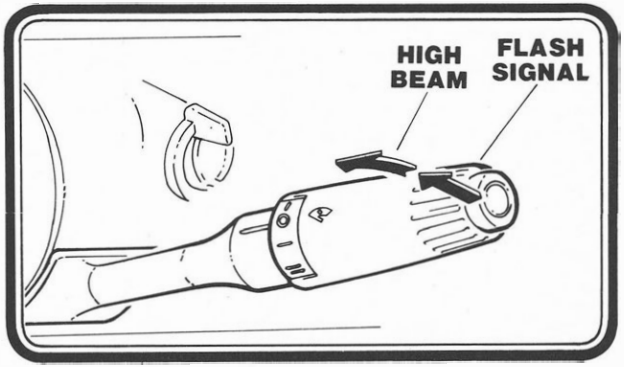
USE OF THE HAZARD WARNING SYSTEM WHILE THE VEHICLE IS MOVING IS PROHIBITED BY LAW IN SOME STATES.



Headlamp Dipping

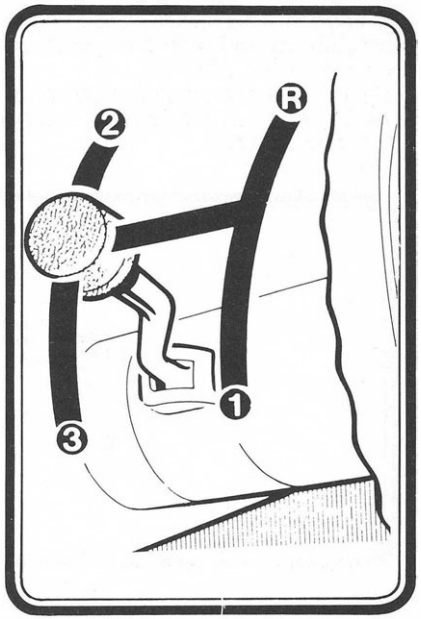
The combination stalk is also used to change the headlamp beam from low to high, or high to low. To select high beam, move the stalk backward, towards the steering wheel and then release. Repeating this operation will change the beam from high back to low. This means that each time the stalk is moved in this manner the light beam will change. When the headlamps are operating on high beam a blue light located on the instrument panel will glow. It is also possible to flash the high beam for signalling purposes without operating the light switch by moving the stalk backward towards the steering wheel. A light resistance will be felt at the flash position. Further movement towards the steering wheel will cause dip switch operation. The lights will remain on high beam as long as the stalk is held up.

Operating the dipper switch alternates the light beams between low and high on both headlamps simultaneously.



Transmission Controls

3 Speed Manual Transmission



This system has three fully synchronised forward gears and a non-synchronised reverse gear.

The shift pattern is in the familiar 'H' Pattern, and the shift lever is situated on the left side of the steering column.

Before first or reverse gear is engaged the shift lever has to be lifted against the spring pressure from the Neutral position.

Neutral — Used when starting the engine and the vehicle is stationary. NEVER allow the vehicle to travel whilst in Neutral.

First Gear — Low. This is synchronised and can be used at speeds up to 30 km/h. To avoid overloading the engine, do not engage over this speed.

Second Gear — Intermediate. Use this gear at speeds up to 50 km/h when driving in traffic. This gear also gives good acceleration or retardation, but do not engage above 70 km/h. Avoid starting from a standstill in second gear as it can cause excessive clutch slip and reduced clutch life.

Third Gear — High. This is the normal cruising gear and should be used for speeds above 50 km/h.

Reverse Gear — The vehicle must be stationary before engaging Reverse gear. A slight pause between pushing in the clutch and engaging this gear is desirable.

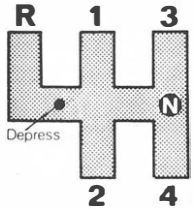
Back-up Lights — These will operate whenever Reverse gear is selected, provided the ignition switch is in the ON position.

Transmission Controls

4 Speed Manual Transmission

This system has four fully synchronised forward gears and a non-synchronised reverse gear.

The gear selection pattern is indicated on the knob of the gear lever.



First Gear — Low: This is synchronised so can be used at speeds up to 25 m/h to avoid overloading the engine.

Second Gear — Low Intermediate: Use this gear at speeds up to 50 km/h when driving in traffic. It is also useful on steep hills.

Third Gear — High Intermediate: Use this gear for accelerating and retarding in the speed range 50-80 km/h.

Fourth Gear — High: This is the normal cruising gear at speeds down to 50 km/h. A lower gear should be selected for accelerating or retarding.

Reverse Gear: This gear must never be engaged unless the car is stationary. A slight pause between pushing the clutch in and moving into gear is desirable. The lever knob must be pushed downwards to pass into the R gate path.

Back-Up Lights: These will operate whenever Reverse is selected, provided the ignition switch is in the ON position.

NOTE: In L6 Chassis-Cab Models fitted with a 4.44:1 rear axle ratio, to ensure minimum exhaust emission the recommended gear shift speeds are: From 1st to 2nd at 16 km/h, from 2nd to 3rd at 24 km/h, and from 3rd to 4th at 40 km/h.

Automatic Transmission

P — PARK
R — REVERSE
N — NEUTRAL
D — DRIVE
S — SECOND GEAR
L — LOW GEAR

The engine will not start unless the selector is in either P or N. Select your "gear" — normally D — after the engine is running.

Column Shift The column mounted shift lever features a spring loading against a stepped segment.

Going down through the "gears" from P to L — lift the lever to move from P to R. You can go through to N and D without lifting the lever. Lift it again to go to S and again to go to L.

Going up from L to P — you can move from L to S to D to N without lifting the lever.

Lift it for either reverse or P.

Floor Shift Where fitted, this console located T-handle shift lever features a straight-line movement.

What the Positions are for:

P — Parking. Always use the parking brake as well. Your car may be started in this position.

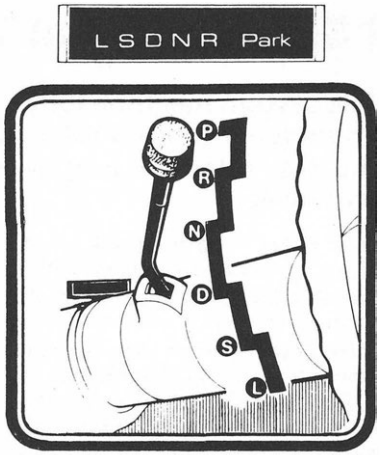
R — Reverse. Your car must be stationary before you select this position.

N — Neutral. This position can be used to start the car. It must be used if the car is being towed on two wheels by a tow truck.

D — Drive. This is the normal driving position and allows for adequate acceleration for all but the most crucial driving situations.

S — Second. This may be used going down moderately steep hills. It will give a slight braking action without the use of the brakes.
Don't use at speeds over 95 km/h on 6 cylinder models or 110 km/h on 8 cylinder models.

L — First. This gives maximum braking for steep hills. Shift back to S or D when you've negotiated the difficult bits. Don't use at speeds over 65 km/h.



Back-Up Lights
These will operate whenever Reverse is selected, provided the ignition switch is in the ON position.

Passing

When the accelerator is pressed down hard, the shifts shown below will normally occur automatically. Speeds given may vary depending on type of rear axle and tyres.

Automatic Driving Don'ts

- Don't rev the engine with the brakes on in either L, S, D or R. This will overheat the transmission.
- Don't rev the engine to hold it on a slope. Use the brakes.
- Don't move into either R or P unless the vehicle has stopped.
- Don't ever coast the vehicle in N — this lessens your control and braking power.

SELECTION	6 CYLINDER EXCEPT 4.44 AXLE SPEED RANGES	6 CYLINDER WITH 4.44 AXLE SPEED RANGES	8 CYLINDER SPEED RANGES	EFFECT
SHIFT LEVER IN D				
Over	110 km/h	90 km/h	110 km/h	No change
Under	100 km/h	80 km/h	100 km/h	Changes to Second Gear
Under	55 km/h	40 km/h	50 km/h	Changes to First Gear
SHIFT LEVER IN S				
Over	60 km/h	45 km/h	55 km/h	No change
Under	55 km/h	40 km/h	50 km/h	Changes to First Gear
SHIFT LEVER IN L				
Don't Exceed	65 km/h	60 km/h	70 km/h	No Change

Floor Controls

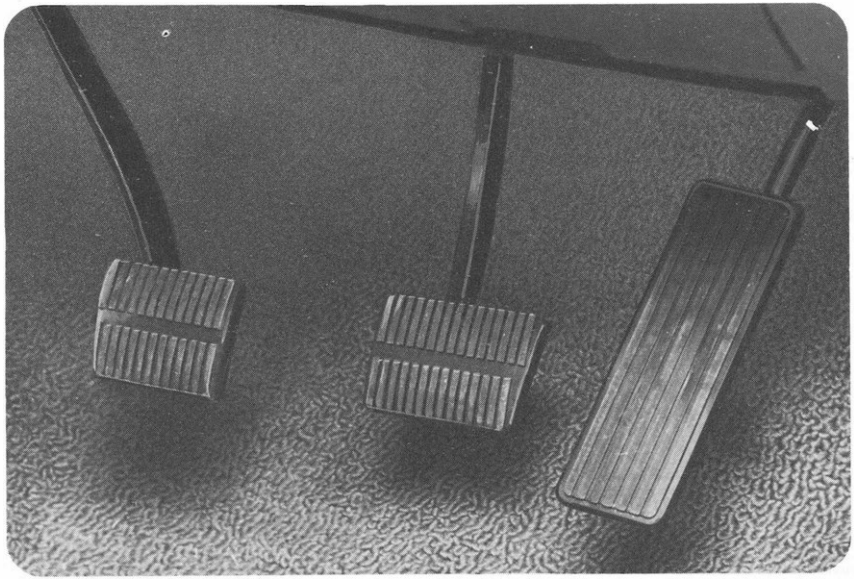
Dual Circuit Brake System

The braking system on your Holden is actually two separate systems; one operating the front wheels, the other operating the back wheels.

Hydraulic pressure is provided from a tandem design master cylinder which apportions pressure to each brake system.

So, if either system is faulty, you can still brake the vehicle, with extra pedal effort and more pedal travel.

After you've been driving your vehicle for a while you will become used to how the brakes feel when they are operating normally. If you notice any change in this "feel", have them checked.



NOTE: You should always adjust your seat to a position where your feet can comfortably lay flat on the floor under the brake and clutch pedals.

Power-Assisted Brakes

These will still work with the engine switched off, but you would have to brake much harder than usual. To be safe — never run downhill with the engine off, and never coast with the engine off. Also, never have the vehicle towed on 4 wheels without a rigid connection between the two vehicles. A tow truck is safer.

Front Disc Brakes

The brakes adjust themselves automatically to compensate for wear.

Rear Drum Brakes

These self adjust every time you brake whilst moving in a reverse direction.

If the brake pedal feels "sloppy" drive the vehicle backwards and forwards a few times, and apply the brakes firmly. This should bring the brakes back to normal.

Accelerator Pedal

The accelerator pedal is used to regulate engine power and vehicle speed.

Clutch Pedal

On models equipped with manual transmission this pedal is used to engage and disengage the clutch which enables you to select and change gears.

Parking Brake

To Apply. Pull the lever straight up using the grip at the end of the lever. **Do not press the release button.**

To Release. Pull the parking brake lever upwards while simultaneously pressing in the release button at the end of the lever with the thumb. After the ratchet system disengages, retain pressure on the button while lowering the lever.

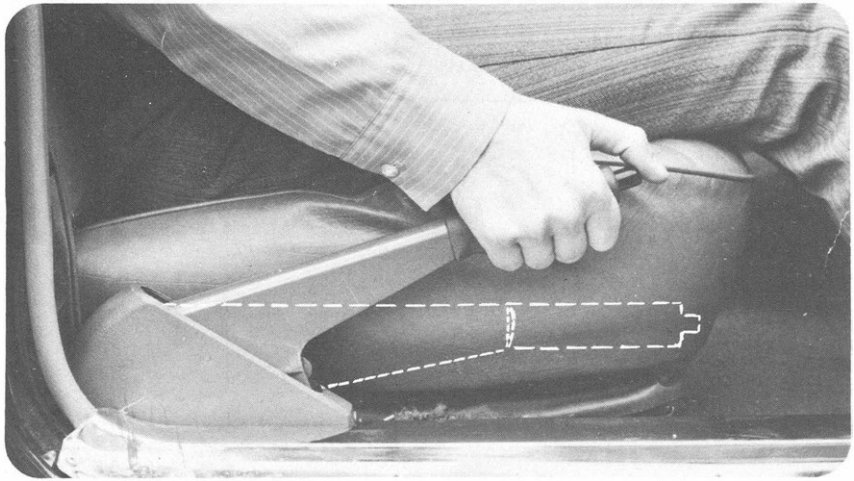
Whether released or applied, the lever remains down, it is not possible to tell if the brake is on by the lever position. However, this type of mechanism enables the lever to stay clear of the driver when entering or leaving the vehicle.

Park Warning Light

With the ignition switch in the ON position, the warning light will operate while the brake is on or not fully released.

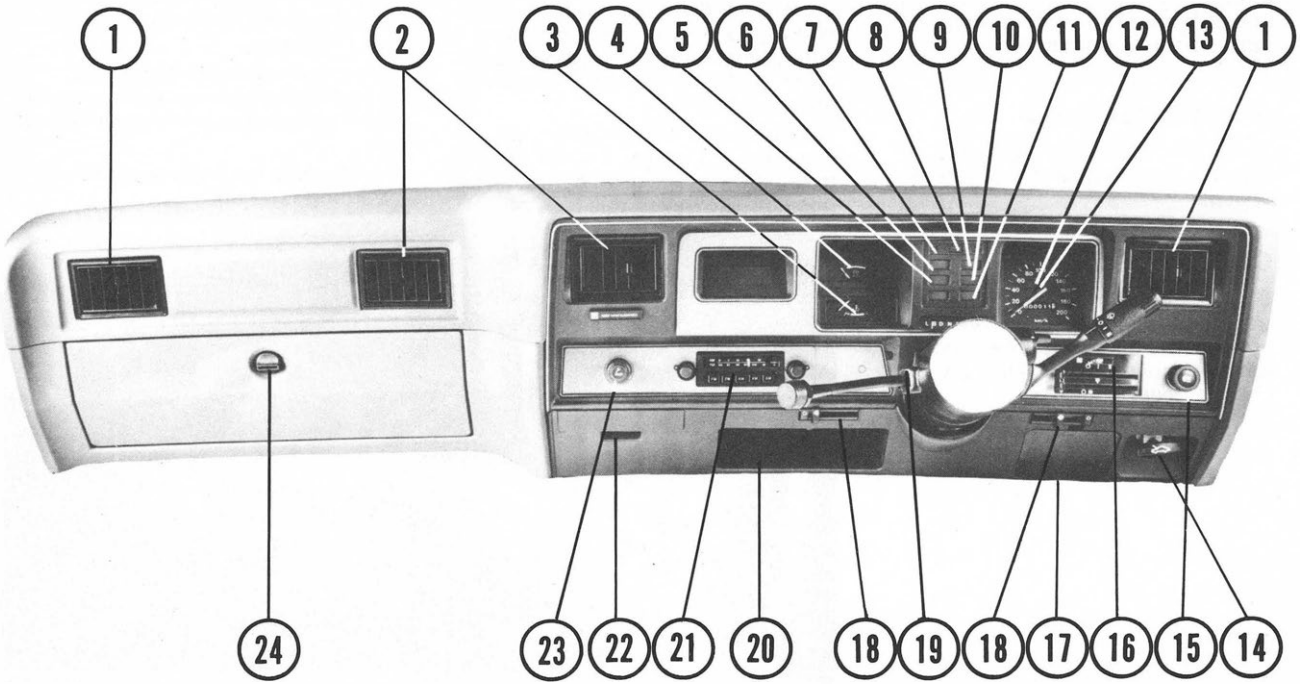
When the brake has been fully released the parking brake warning light in the instrument panel will go out.

Never drive the vehicle with the warning light on.



Instrument Panel Controls and Dials

These pages detail all available instruments and control options. Some features may not be fitted to your vehicle.



1. Upper Level Flow-Through Ventilation Outlets—Outer.
2. Upper Level Flow-Through Ventilation Outlets—Inner.
3. Temperature Gauge.
4. Fuel Gauge.
5. Parking Brake Warning Light.
6. Oil Pressure Warning Light.
7. Turn Signal Indicator Lights.
8. Headlamp High-Beam Indicator Light.
9. Generator Warning Light.
10. Brake System Failure Warning Light.
11. Fuel Economy Light.
12. Speedometer.
13. Odometer.
14. Engine Hood Release Knob.
15. Light Switch.
16. Ventilation Controls.
17. Fuse Box Cover Panel.
18. Lower Level Flow-Through Ventilation Slide Control.
19. Hazard Warning Flasher Button.
20. Instrument Panel Storage Compartment.
21. Radio.
22 Ash Tray.
23 Cigarette Lighter.
24. Instrument Panel Compartment Lock.

Instrument Panel Controls, Dials and Lights

Temperature Gauge

When your engine is running at normal temperature the needle will be in the area marked by the two lines. If it moves to the Red, you have an overheating problem. Stop the engine and let it cool down before trying to fix it. For instructions, see page 46.

Fuel Gauge

When the ignition is on, this gauge indicates the amount of fuel in your tank.

Parking Brake Warning Light

This light stays on until the brake has been properly released.

Oil Pressure Warning Light

If this light stays on after the engine is running, and warm, it indicates a fault which should be corrected.

Turn Signal Indicator Lights

These flash when you use the turn indicator or the hazard switch.

Headlight High-beam Indicator Light

This glows blue when the headlights are on high beam.

Generator Warning Light

This lights up when the engine is turned on and should go out as soon as it starts. If it remains on, it indicates a fault which must be corrected.

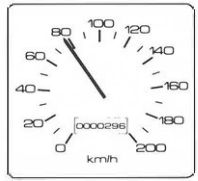
Brake Failure Warning Light

If this lights up there may be something wrong with the braking system. Pull up immediately and do not drive on unless you are sure you can do so safely.

Fuel Economy Light

This light will glow under hard acceleration and fast driving, showing increased fuel consumption. To save fuel drive so that the light doesn't come on.

Speedometer and Odometer



The speedometer face is calibrated from 0 to 200 kilometres per hour km/h.

The odometer is the set of numbers on the lower speedo face. They indicate the number of kilometres your car has travelled.

Light Switch

This switch controls all your lighting and lamps. Pulling it out to the first stop switches on the Parking, Tail, Number Plates and Instrument Panel lighting. Pulling it right out turns on all lights.

Brightness of the instrument panel light and the console light on automatics, is controlled by rotating the switch.

Cigarette Lighter

To use, press the knob in. It will pop back when it is ready to use.

(Optional) INSTRUMENTS

Oil Pressure Gauge

This indicates the operating oil pressure in the engine. If, when running the engine above idle speed, the gauge fails to indicate a pressure or if it moves into the Red section you should stop and have the cause investigated.

Voltmeter

This indicates the condition of the electrical charging system. The needle should stay in the central area of the dial, if it moves into the left red zone it indicates a low voltage condition and if it moves into the right red zone a high voltage condition. If either of the red zones are indicated have it checked immediately. A Red warning light will glow in the event of a failure.

Temperature Gauge

When your engine is running at normal temperature the needle will be in the area marked by the two lines. If it moves to the Red, you have an overheating problem. Stop the engine and let it cool down before trying to fix it. For instructions, see page 46.

Fuel Gauge

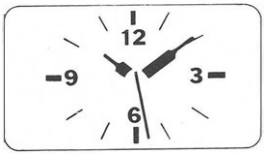
When the ignition is on, this gauge indicates the amount of fuel in your tank.

Tachometer

This is graduated from 0 to 70 and shows the engine revolutions in hundreds per minute (R.P.M.).

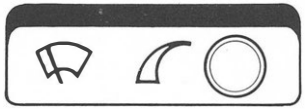
From 55 to 70 is the Red section and at this level serious engine damage may result.

Clock



To adjust the time setting, pull out the knob at the bottom and turn.

Dwell Control



The dwell control can be switched into operation by turning the knob in a clockwise direction, from the initial position, which progressively increases the dwell period between wiper blade sweeps.

Operation of the wiper blade speed control in either slow or fast positions will override the dwell control setting. If the wiper speed control is returned to the Off position, the dwell control will take over at the particular setting being used. To turn off the dwell control, the knob must be turned back in the anti-clockwise direction to the switched OFF position.

Ventilation System

Explanation of Symbols for Heater and Air-Conditioner

Symbol	Heater	Air Conditioner	Symbol Logic — Remarks
	Distribution Control Levers	Mode Control	OFF or SHUT
○ Blue	—	Mode Control	Recirculation of inside air— and this is passed through the refrigerator core, being cooled and dehumidified. This extracts moisture, dust and pollen in the air, leaving it cleaner and relatively dryer.
White	—	Mode Control	Outside air is drawn in—
Blue Red	—	Mode Control	Intake of outside air — Dehumidified — can be reheated — Partial heat gives warmer air at feet and cooler refreshing air at face level.
Green	Distribution Control Lever	Mode Control	Normal ventilation as in a vehicle without Air Conditioning.
▲	Distribution Control Lever Windscreen	Mode Control	Outside air is distributed to the windshield for demisting and it can also be heated.
▼	Distribution Control Lever (Floor)	Mode Control	Outside air is distributed to the floor outlets and it can also be heated.
	Fan Control Switch	Fan Control Switch	Fan both units
(Blue)	Heat Control Lever	Temperature Control Lever	Heater units — Outside air only is available. Air Conditioning units — Cooled and Dehumidified inside or outside air is available.
(Red)	Heat Control Lever	Temperature Control Lever	Heater units — Heated outside air only is available. Air Conditioning units — Dehumidified and reheated, or heated only outside air is available.

Ventilation and Heating System

The vehicle features a flow-through ventilation system for your comfort. Under reasonable conditions, it shouldn't be necessary to open the windows at any time. Fresh air is ducted into the vehicle through the plenum chamber in front of the windshield.

Extractor vents are provided to complete the control of the flow-through system and act as exhaust outlets to the atmosphere for stale air.

Note: Don't allow the inlet grille to be covered or clogged with leaves, snow, etc.

Lower Level Ventilation

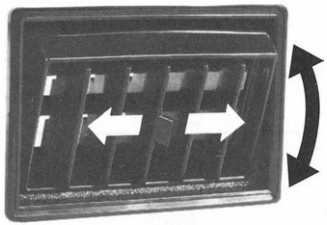
(Not with air conditioning)

There are two outlet ducts located below the instrument panel, one at either end. The air flow to the foot wells can be regulated by adjusting the lower ventilation adjuster knob marked and located on both sides of the steering column in the instrument panel.

Upper Level Ventilation

(Not with air conditioning)

Air enters the passenger compartment via four outlets one either end of the instrument panel for normal ram air and two outlets located in the centre of the instrument panel for forced air ventilation.



Horizontal direction adjustment of air flow can be made by position of vane louvres as desired. Air flow can be shut off by positioning the louvres to the closed position.

When a heater-demister or a forced ventilation unit is being operated, and the vehicle speed is below 55 km/h, it is recommended that the upper and lower level outlets, at both ends of the instrument panel, are shut off. This will prevent recirculation of the interior air through the plenum chamber, and so retain the full flow-through effect, under these operating conditions.

Heater/Demister

Operating the Controls

Fan Switch

O — Switched off.

I — Low speed.

II — High speed.

The fan will operate only when the ignition switch is in the ON or ACC positions.

Distribution Lever (Top Lever)

O — In this position the air supply to the heater core is shut off but outside air is available. Use of the fan will boost air flow.

▲ — All air is directed to the windshield for demisting purposes.

▼ — Most of the air is directed to the central floor outlets, some goes to the demisting system.

Temperature Lever (Bottom lever)

With the distribution lever in the O position and the Temperature lever to the □ blue position unheated air enters via the two centre dash outlets.

With the lever on the blue block no air is being heated.

Moving the lever towards the red block increases the heating of the air. On the red block all air is heated.

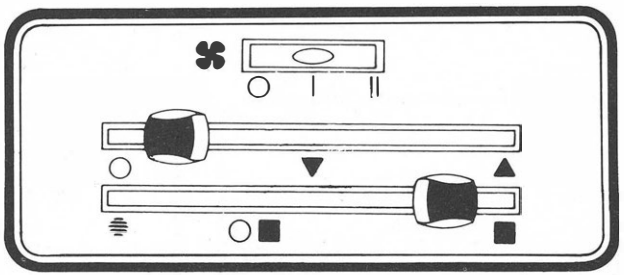
How to use the Ventilation System

Forced Ventilation

This can be operated while stationary or while moving at a slow speed to supplement the normal air ventilation system. Air flow is boosted by using the blower fan. The volume of air entering through the two centre ducts can be controlled by using the fan speeds.

Normal Ventilation

Top Lever	—	O
Bottom Lever	—	⇟
Fan	—	As required



Heater-Demister with Forced Ventilation Controls

How to use the Ventilation System

Windshield defrosting

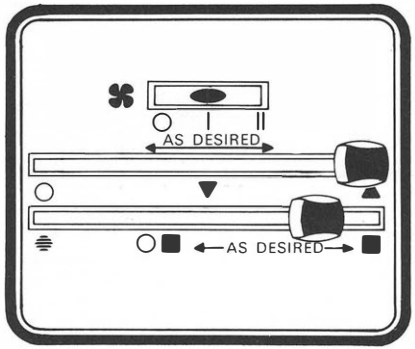
Top lever — ▲
Bottom lever — AS DESIRED — depending on the weather.
Fan — AS DESIRED — depending on the weather.

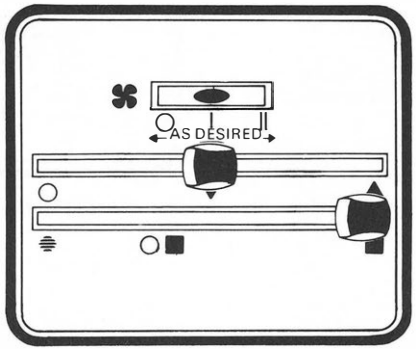
Heating

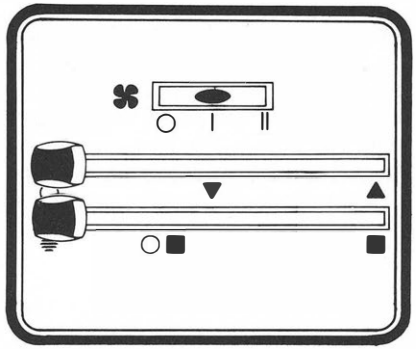
Top lever — ▼
Bottom lever — ■ (Red)
Fan — AS DESIRED.

Ventilating

Top lever — O
Bottom lever — ❋
Fan — Position 1 or 2
As desired.







Air Conditioning (Optional)

The controls for the air conditioner are positioned between the driver's door and the steering column, beside the light switch.

Every week you should move the mode lever to either ↻ or ✈ and the temperature lever to full heat for about 5 minutes.

Fan

The air flow through the system is controlled by the fan speed which operates automatically with the ignition switch on ON or ACC except when the mode lever is at O.

Mode Lever (Top lever)

This gives you the selection and distribution of the air. Read the chart on the next page and this will tell you where to set the lever to suit your requirements.

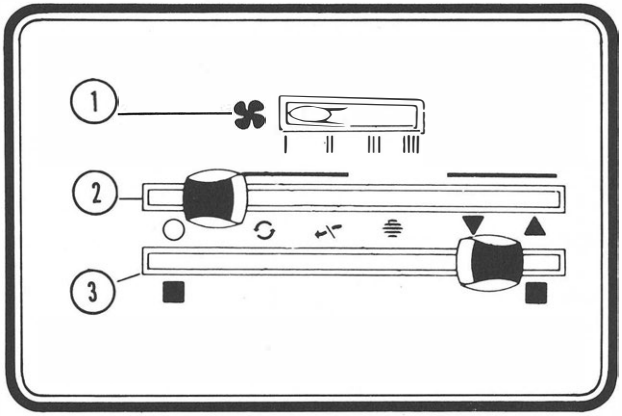
Temperature Lever

This gives you your choice of temperature, from a minimum of 5°C to 38°C, depending of course on the outside temperature, again read the chart on the next page.

To cool a hot Vehicle Quickly

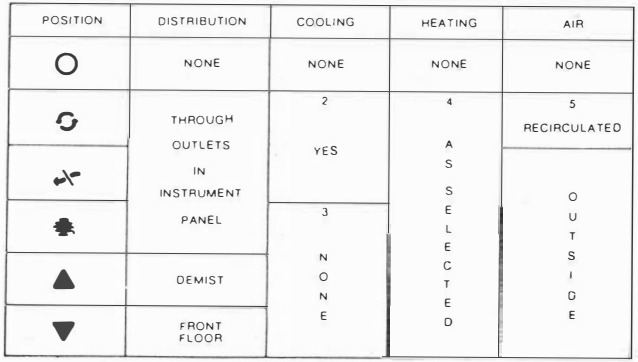
Open both windows about 200 mm. Put fan onto IIII Mode lever to ○ Temperature lever to□ (Blue).

After several minutes, close the windows, move the mode lever to ↻ and use a high fan speed.



Mode Control Lever Operation Chart Notes

1. Where maximum cooling effect is desired for the driver, the two passenger side outlets should be closed off.
2. All air is passed through the refrigerator core being cooled and dehumidified. This extracts moisture, dust or pollen from the air, leaving it cleaner and relatively drier. Heating of this air can be achieved by moving the temperature control to the desired position.
3. Incoming air is taken directly from the plenum chamber and will therefore contain any dust, pollen or moisture present in the outside air.
4. Use of the temperature control lever will provide the desired level of heating.
5. Maximum effect is achieved for heating or cooling; also for reducing intake of outside fumes from passing vehicles while retaining interior pressurisation.



Mode Control Lever Operation

Optional Features

These are not fitted as standard equipment and are therefore not applicable to all vehicles. Superlift Shock Absorbers are NOT available on 1 Ton Chassis Cab vehicles and must NOT be added as they will render inoperative the load sensitive brake balancing system.

Superlift Shock Absorbers

These allow direct control of vehicle level, so that when a vehicle is loaded or towing a caravan or trailer, the loaded height can be readjusted to give improved ride and handling and ground clearance in rough terrain. Also, they maintain a better headlamp level when high beam is used.

Superlift shock absorbers use compressed air and can be inflated or deflated through an air valve, similar to any standard tyre.

On the Utility and Panel Van these valves are located inside the body panel on the right side at the rear of the tail lamp body.

AIR PRESSURE RECOMMENDATIONS

1. The shock absorbers should be inflated when the vehicle is standing on a level surface and only until:
   (a) The vehicle appears to be level.
   (b) Maximum permissible pressure is reached (620kPa).
   (c) Satisfactory ride characteristics are obtained based on previous usage, but not exceeding the limits above.
2. Never allow the pressure to fall below 70 kPa as this will result in damage to the shock absorbers.
3. Maximum permissible pressure when the vehicle is fully loaded is 620 kPa.
4. Maximum permissible pressure when the vehicle is unloaded is 210 kPa.

"Limited Slip" Differential

Where this differential is fitted, it can be identified by a metal tag retained by the axle filler plug. The label calls attention to the need for special oil in this type of axle which must comply with the **GM HN1561 Specification.**

Use of unsuitable oil could result in noisy operation and/or excessive wear.

The "Limited Slip" Differential directs the major driving force to the rear wheel having the greater amount of traction, but it will not interfere with the normal differential action.

When the rear wheels are under extremely unbalanced tractive conditions (such as when one wheel is on a dry road surface and the other is on ice or mud) wheel spin can occur if over-acceleration is attempted. This condition may also be experienced if the driver over-accelerates on a wet road where a sharp bend must be negotiated. It is important that there be no excessive rear tyre differences. One indication of this condition is swerving on acceleration. If this is encountered, check the rear wheels for different tyre size, air pressures of excessively different wear and tread patterns.

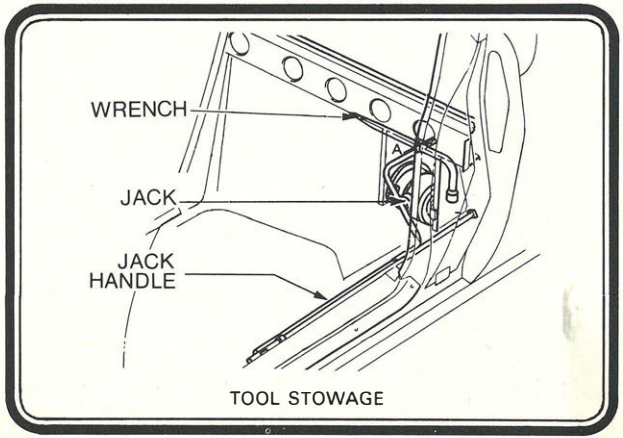
CAUTION: Never run the engine with a gear engaged and one wheel raised if the vehicle is fitted with a "Limited Slip" differential. The driving force directed to the wheel on the ground will cause the vehicle to move.

Spare Wheel Storage

To Remove

Move the seat forward as far as possible and remove the jack handle. Unscrew the jack and remove it and the wheel nut wrench.

Insert the jack handle into the hole at the top right of the rear numberplate and lower the spare wheel by turning the handle anti-clockwise. Tilt the wheel retainer centre piece and remove the wheel.

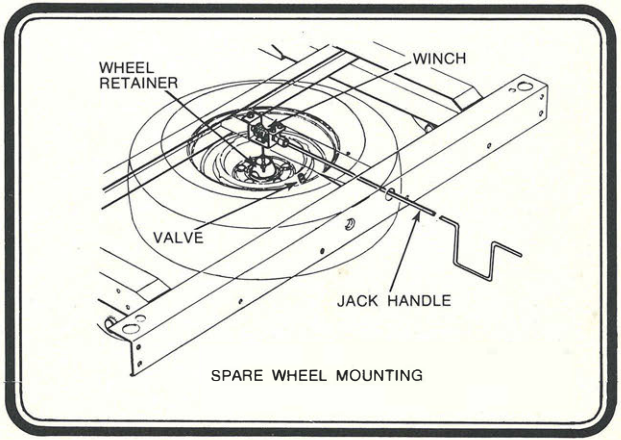


TOOL STOWAGE

To Replace

Reverse the above lowering procedure and turn the jack handle clockwise until the wheel is firmly in place. Replace the jack wheel nut wrench and jack handle to their former positions. Return seat to normal.

Note: Make sure the valve on the spare wheel is at the rear to allow access.



SPARE WHEEL MOUNTING

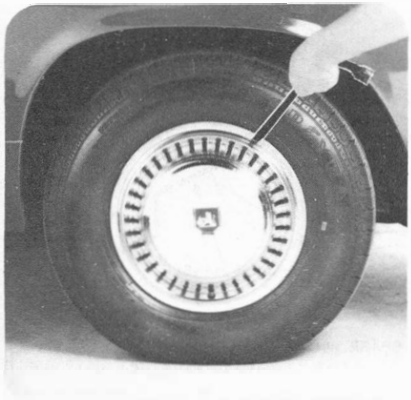
Removing the Wheel Trim

Wheel Covers or Wheel Trim Ring

To Remove

Push the blade end of the wheel nut wrench between the wheel cover/trim ring and the wheel and force it in about halfway.

Moving round the wheel, lightly pry the cover/trim ring off at several points by twisting the wrench away from the tyre.

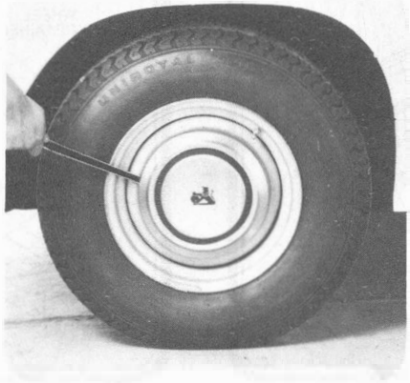


To Replace

Press the cover/trim ring into position against the wheel and knock it on with your hand. You may need to pad your hand for this.

Wheel Nut Covers can be prised off with the end of the wrench, and replaced by pushing them on with your hand.

Wheel Centre Cover is removed by removing the wheel nut covers and loosening the wheel nuts. Be sure to replace the wheel nuts tightly.



To replace, locate the wheel centre cover by positioning it over the wheel nuts after these have been tightened to the correct torque. Then push it in until it snaps into place.

Replace the wheel nut covers.

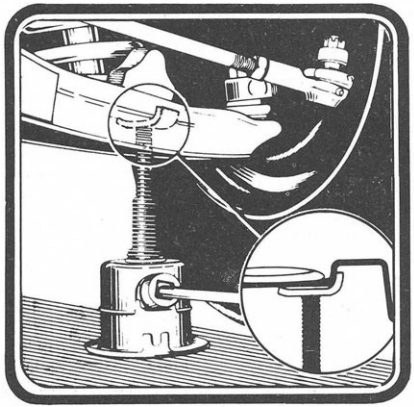
Wheel Changing

Put on the parking brake and put the vehicle in Reverse (manuals) or Park (automatics).

Block the wheel diagonally opposite the jacking position. Remove the tools and spare wheel.

Remove the wheel trim and loosen the wheel nuts slightly. Don't remove them.

Open the folding jack handle and slide the locating piece over the hinge. Using the jack handle position the jack under the vehicle according to the illustration.

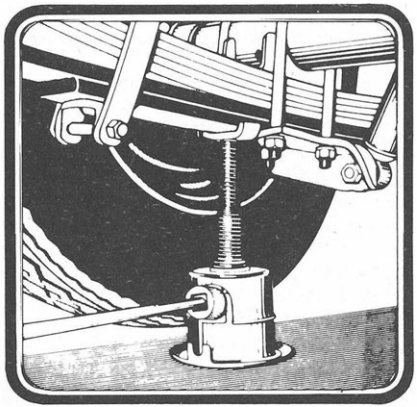


Front Jacking Position

Operate the jack by placing the square end of the jack handle into the recess provided and turn the handle clockwise to raise the vehicle until the tyre clears the ground.

Remove the wheel nuts and change the wheel.

Tighten the wheel nuts with your fingers then with the wrench in the order shown. Lower the vehicle until the wheel touches the ground and is held from rotating. Fully tighten the wheel nuts using the sequence illustrated.



Rear Jacking Position

Completely lower the vehicle and remove the jack using the handle in the bracket provided.

Replace the wheel trim and stow the tools and changed wheel according to the previous instructions.

Wheel Changing

Safety Hints

1. Carefully follow jacking instructions in order to reduce the possibility of serious personal injury.
2. The jack is designed for use ONLY when changing wheels.
3. Never get beneath the vehicle when supported by the jack only.
4. Do not start or run the engine while the vehicle is on the jack only.
5. All Passengers should be out of the vehicle when it is on the jack and the handbrake should be firmly applied.

Instructions

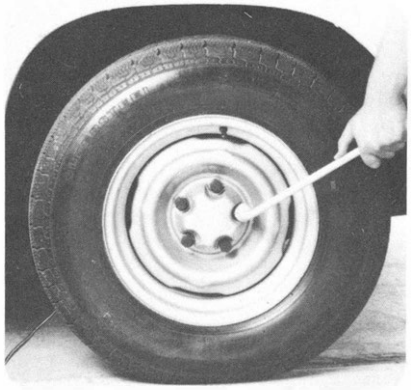
Put on the parking brake and put the car in Park.

Remove the tools and spare wheel.

Remove the wheel trim, except for alloy wheels and loosen the wheel nuts slightly. Don't remove them. Put the jack under the car as shown and work the handle back and forth to raise the car off the ground. Jacking recesses are located in the vehicle body behind both front wheel arches and in front of the rear wheel arches.

Remove the wheel nuts and change the wheel.

Tighten the wheel nuts with your fingers then with the wrench in the order shown. Lower the car and tighten the wheel nuts again with the wrench. As soon as possible have the wheel nuts checked for correct tightness.



CAUTION: As soon as practicable, after a wheel change, the wheel nut torques should be checked at a GMH Dealership, or by a competent person, to ensure correct tightness. Refer page 68 for wheel nut torque specifications.

Wheel Nut Tightening Sequence

Trailer Towing

IMPORTANT: Handling, durability and economy may be affected by towing a trailer or caravan.
Before you even think about doing this, check that the correct equipment is fitted to your vehicle. Your GMH Dealer will help you.
Never exceed the loadings given in the table on the next page.

Running-in Period

It is best to drive your new Holden for 1,500 kilometres before towing a load. If you must tow before this do not exceed 80 km/h.

The same applies if you have a new or reconditioned engine, transmission or rear axle.

Maintenance — Automatic Transmission

More frequent vehicle maintenance is required when using you vehicle to pull a trailer. Where an automatic transmission is fitted the transmission fluid will need to be changed every 12 months or 20,000 kilometres.

Tongue Load

Your Vehicle/trailer combination will handle best if the load at the attachment coupling is kept within the limits specified on page 44.

The load imposed on the towbar ball must be included in the maximum rear axle loading and the maximum loaded vehicle weight, (Refer chart—page 45) unless a load equalising hitch is used which fully compensates for towbar ball load by restoring the towbar tongue height to the unhitched position.

Tyres

When towing, your tyres should be inflated to the maximum recommended pressure.

Electrical connection

A special wiring harness is available from your GMH Dealer or accessories stockist. This is the only system recommended by GMH and use of any other may affect your warranty.

CAUTIONS:

1. A frame mounted equalising hitch with a sway control of sufficient capacity is required for trailers over 1375 kg loaded weight on Panel Van and Utility models. The loaded trailer weight for 1 Ton Chassis Cab Vehicles is 1475 kg Maximum.
2. Do not use axle-mounted hitches. They can cause damage to the axle housing, wheel bearings, wheels or tyres.
3. Trailer brakes are required on trailers over 500 kg loaded weight except where State Laws may specify a lower limit.
4. It is permissible to tap into the rear brake system with a unit using not more than .21 cc of fluid. It must not be fitted to the front brake system.

Permissible Operating Loads

Before contemplating the towing of a trailer or caravan, it is necessary to check that the correct equipment is fitted to the vehicle to cover both the legal and manufacturer's requirements. Therefore, the matter should be discussed with your local Authority and a GMH Dealer.

APPLICATION — ALL MODELS	MAXIMUM TRAILER WEIGHT (Tare weight plus all load)
No brakes fitted to trailer.	500 kg (1100 lbs)
Fitted with independently operated trailer brakes and a standard GM P & A tow-bar	900 kg (1980 lbs)
Fitted with an independent driver operated trailer brake system and an equalizing load trailer hitch. (Heavy duty tow-bar.)	1800 kg (3960 lbs)

MAX TOW CAPACITY FOR

Loading

Overloading is a safety hazard and could also shorten the life of your vehicle or its parts.

Maximum loading limits for your particular vehicle are shown in the chart below.

Tyre Maximum Load Rating and Maximum Vehicle Loading

Kerb weight is the weight of an unloaded vehicle which includes the weight of all coolants and lubricants together with a full tank of fuel. It must be understood that the maximum load rating shown on the tyre placard is not an actual load capacity that can be used for each wheel.

While the tyre manufacturers rate the tyre for this load application at the maximum pressure shown on the placard, the vehicle manufacturer's suspension, ride and handling characteristics must be taken into account. Therefore, the maximum rear axle loading or the maximum loaded vehicle weight should not be exceeded.

Towbar Loads

The load imposed on the towbar ball must be included in the maximum rear axle loading and the maximum loaded vehicle weight, (Refer chart) unless a load equalising hitch is used which fully compensates for towbar ball load by restoring the towbar tongue height to the unhitched position.

Roof Rack Loads

No increase in maximum loaded vehicle weight is allowable where a roof rack is fitted. It must be understood that roof rack loads alter the handling characteristics of a vehicle due to a change in the centre of gravity. When carrying loads on the roof rack avoid abrupt swerving or sharp steering manoeuvres. The load should be evenly distributed. A load of no more than 68 kg is suggested as a reasonable limit.

Booster Springs and Superlift Shockabsorbers

The use of booster springs or superlift shockabsorbers DOES NOT increase the load capacity of the vehicle. The maximum loads shown in the chart below must NOT be exceeded if overloading of axle components and the consequent shortening of service life is to be avoided.

Superlift shockabsorbers do allow adjustment of the vehicle's height, so that improved ride and handling and better ground clearance in rough terrain may be obtained when running heavily laden.

Vehicle Weight Chart — Estimated

Model	Kerb Weight kg	Maximum Rear Axle Loading kg	Gross Vehicle Mass.
Holden Panel Van	1432	1202	As stated on G.V.M. Section of A.D.R. Compliance Plate
Holden Utility	1360	1242	
Kingswood Utility	1370	1242	
*Holden Chassis/Cab	1295	1796	

*Front Axle Loading: L6 minimum 760 kg, maximum 940 kg.
V8 minimum 820 kg, maximum 1050kg.

At all times the total of the front axle load and the rear axle load should not exceed the maximum loaded vehicle weight specified.

Overheating

If this happens, stop by the road side and let the engine idle for about two minutes. Then turn it off and open the bonnet.

While the engine is cooling, check your fan belt for slipping or breakage and check for damage to the radiator hoses. Take care as the hoses will be hot.

When the engine is cool, check the coolant level in the radiator as follows:—

Cover the radiator cap with a heavy cloth and turn it to the left — don't press down on it. You will probably hear a hissing noise now as pressure is released. When this stops, continue to turn the cap, pressing down this time, until it can be removed.

Check the coolant level and add water if necessary. Add water with the engine idling and only when the engine is quite cool.

If overheating occurs again, get a mechanic to the car as quickly as possible.

CAUTION: DO NOT remove the radiator cap while the engine is still hot because the cooling system will blow out scalding fluid and steam under pressure which is likely to cause serious personal injury and loss of coolant.

Towing a Disabled Vehicle

Towing by a Tow Rope Type attachment

The tow rope and safety chains must be attached to one of the two eyes on the front axle. Make certain that the rope attachment to the tow vehicle is as low as possible.

For the sake of safety and to prevent damage to the vehicle and tow rope it is advisable to avoid jerky movements and to drive slowly during towing operations.

It is always preferable to have a vehicle towed by a tow truck. If this is not possible heed the following cautions.

Never tow a vehicle on four wheels with the ignition switch in LOCK or ACC.

Never tow a vehicle at speeds over 80 km/h.

Power assisted brakes, refer page 24.

Don't attach lifting hooks or chains to bumper bars or bumper brackets, or to any damaged part of the vehicle.

Only the driver should be in a towed vehicle.

Vehicles with damaged transmissions must not be towed unless the propeller shaft has been removed.

Automatic vehicles must not be towed for more than 55 km or at over 55 km/h unless the propeller shaft is removed.

Towing by Tow Truck

The vehicle should be raised until the lifted wheels are a minimum of 10 cm from the ground, care should be taken to ensure adequate ground clearance at the opposite end of the vehicle.

In cases of rear end damage it may be necessary to lift the rear end of the vehicle and tow on the front wheels only. In such cases the steering wheel must be clamped in the straight ahead position using a clamping device designed for towing service use, such as those provided by towing equipment manufacturers. Do not use the vehicle's steering column lock for this purpose.

In Case of Emergency

CAUTION: Never tow a manual transmission-equipped vehicle to start, because the surge forward when the engine starts could cause a collision with the towing vehicle.

Push Starting

MANUAL TRANSMISSIONS

Should it ever be necessary to start the engine by pushing the vehicle:—

1. Place the gear shift lever in NEUTRAL (N).
2. Check the accelerator pedal setting as it applies to the Starting Procedure (page 16).
3. Turn the ignition switch to ON. When the vehicle reaches approx. 15 km/h.—
4. Depress the clutch.
5. Select high gear.
6. Slowly allow the clutch pedal to come up.
   When the engine starts—
7. Drive away from the pushing vehicle.
8. Stop your vehicle at the side of the road.
9. Allow the engine operation to normalise before proceeding.

Bumpers and other parts contacted by the pushing vehicle should be protected from damage during pushing.

AUTOMATIC TRANSMISSIONS

If for any reason the starter motor is inoperative, it is **not possible** with an automatic transmission to push start the vehicle.

If the fault is a flat battery, the engine can be started with the aid of a booster battery. (Refer Starting with Jumper Leads.)

Starting with Jumper Leads

The following procedure is for use **only** under the following conditions. Departures from these conditions and procedures, could result in: (1) serious personal injury (particularly to eyes) or property damage from such things as battery explosion, battery acid or electrical burns, or (2) damage to electronic components in either vehicle. If all the conditions cannot be met, or if you are uncertain about them, we strongly recommend for your safety and that of your vehicle that you leave the starting to a competent mechanic.

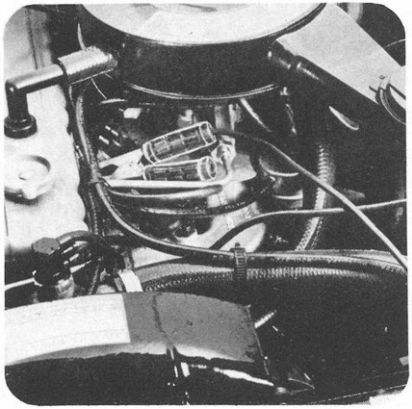
The battery in the other vehicle (booster battery) must be of the **same nominal voltage**, 12 volts and must be negatively grounded. The nominal voltage and grounding of the other vehicle's battery may be determined by checking the specifications in its owner's manual. Use of a booster battery of a higher nominal voltage, or which is positively grounded may result in serious personal injury or property damage.

CAUTION: Never expose a battery to open flame or electric spark — battery action generates hydrogen gas which is flammable and explosive. Don't allow battery fluid to contact eyes, skin, fabrics, or painted surfaces. The fluid is a sulphuric acid solution which could cause serious personal injury or property damage. Flush any contacted area immediately with water. Wear eye protection such as industrial safety spectacles or goggles when working on or near battery. Remove rings, metal watch bands and other metal jewellery before jump starting or working around a battery. Be careful in using metal tools and equipment. If such metal should contact the positive battery terminal (or metal in contact with it) and any other metal on the vehicle a short circuit may occur which could cause personal injury. Batteries and battery acid should always be kept out of reach of children.

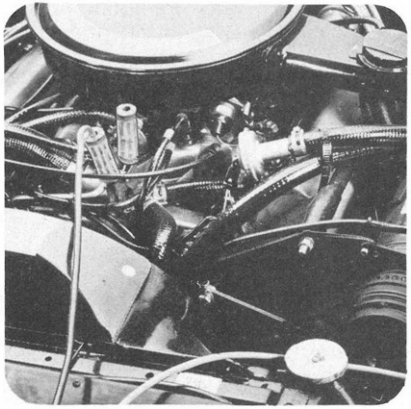
To Jump Start

1. Position the two vehicles so they are **not** touching and set the parking brakes. Place the automatic transmission in PARK (**NEUTRAL for manual transmission**) in each vehicle. Also turn off lights, heater and all other unnecessary electrical loads.
2. Remove vent caps* (or covers) from both the booster and the discharge batteries. Lay a cloth over the open vent wells of each battery. These two actions help reduce the explosion hazard always present in either battery when connecting live booster batteries to dead batteries.
3. Attach one end of one jumper cable to the positive terminal of the **booster battery** (identified by a red colour, + or P on the battery case, post or clamp) and the other end of the same cable to the positive terminal of the **discharge battery**.
4. Attach one end of the remaining negative cable to the negative terminal (black colour, — or N) of the **booster battery**, and the other end to your vehicle according to the illustration opposite (**do not connect directly to negative post of dead battery**) taking care that the clamps from one cable do not inadvertently touch the clamps on the other cable. Do not lean over the battery when making this connection.
5. Start the engine in the vehicle that is providing the jump start (if it was not running). Let it run a few minutes, then start the engine in the vehicle with the discharged battery.
6. Reverse the above sequence exactly when removing the jumper cables. Reinstall the vent caps and dispose in a safe manner, any cloths used to cover the vent wells (or covers), as the cloths may have corrosive acid on them.

* Some batteries do not have vent caps.



6 Cylinder Engine The final earth connection is onto the cylinder head.



8 Cylinder Engine The final earth connection is onto the thermostat housing retaining bolt at the top of the engine.

Emission Control Systems

IMPORTANT: This is an explanation of the operation of the emission control systems fitted to your new vehicle.

Introduction

There are three areas from which pollutants are emitted on an uncontrolled vehicle:

(a) Exhaust System
(b) Crankcase
(c) Fuel System.

A number of modifications have been made by General Motors-Holden's Limited to control the amount of pollutants emitted from your new vehicle.

The systems are very complex in their operation and this Handbook has been produced to assist you in understanding their function by briefly explaining the operation of the various components involved.

Sources of Emissions

During the combustion process in an automotive engine, some of the fuel (hydrocarbons) fails to burn and is discharged into the engine crankcase or exhaust system. Additional hydrocarbons are emitted into the atmosphere through evaporation of petrol vapours from the fuel tank and carburettor. Of the total hydrocarbons coming from uncontrolled automobiles, about 25% are emitted from the crankcase, 20% from the fuel system and 55% from the engine exhaust.

In addition to hydrocarbons, carbon monoxide and oxides of nitrogen are also formed during the combustion process. These are also discharged into the exhaust system.

What General Motors Has Done

Since research on the control of vehicle emissions first began General Motors world-wide resources have developed a number of control systems which are highly effective in reducing undesirable emissions. These systems are discussed in this publication.

Control of hydrocarbon emissions is important since, when subjected to sunlight under certain conditions, they may react with other gases to form photochemical smog. Carbon monoxide does not enter into the complex photochemical smog reaction, but it is itself a pollutant and, thus, has been controlled to prevent high atmospheric concentrations.

Exhaust Emissions

The exhaust of a petrol automobile engine contains three significant air pollutants: carbon monoxide, unburned hydrocarbons, and oxides of nitrogen. It also contains small amounts of solid matter — called particulates — made up largely of lead compounds from the tetraethyl lead used to increase the octane rating of petrol.

Exhaust Emission Control Systems

Controlled Combustion System (CCS) Components

CARBURETTOR

The carburettor has been calibrated to give a leaner mixture of a better quality, particularly at idle or during slow speed operation.

IDLE STOP SOLENOID (6 Cylinder Engines)

The idle stop solenoid cuts off the idle air fuel mixture flowing through the mixture by-pass system when the ignition is switched off. This prevents the engine "running on".

IDLE STOP SOLENOID (8 Cylinder Engines)

The idle stop solenoid allows the throttle valve to close almost completely from the normal engine idle position and so starves the engine of fuel and air. This feature assists in reducing the possibility of engine run-on. The solenoid is de-activated when the ignition switch is turned off. As the operation of the idle solenoid determines the engine idle speed it is important that the accelerator is depressed about half way down while the engine is being started. Refer to the recommended starting procedure in the main part of the owner's handbook.

AUTOMATIC CHOKE (6 Cylinder Engines)

The choke valve is operated by a bi-metal coil spring which is heated by two heating elements. One element is "ON" whenever the ignition is "ON" while the other is only switched on at a predetermined temperature within the choke cover. As the bi-metal coil warms the closing force reduces and the choke valve progressively opens.

AUTOMATIC CHOKE (8 Cylinder Engines)

The automatic choke is operated by a bi-metallic coil, which is heated by exhaust gas drawn from the exhaust cross-over passage that runs through the inlet manifold. As the coil heats up the choke progressively comes out of operation.

The choke secondary vacuum break is a new feature which provides for increased choke action in cold weather for good driveability. In warm weather the choke action is reduced to prevent stalling. Lower CO and HC emission during warm weather starts result.

This feature is in addition to the main or primary vacuum break whose purpose is to open the choke on cold weather starts to a point where the engine will run without loading or stalling.

EARLY FUEL EVAPORATION (EFE) SYSTEM

The EFE system is used to provide a source of rapid heat to the engine induction system during cold driveaway. Rapid heating is desirable because it provides for quick fuel evaporation and more uniform fuel distribution to aid cold driveability. It also reduces the length of time carburettor choking is required making reduction in exhaust emission levels possible.

The system uses a valve which increases the exhaust gas flow under the intake manifold during cold engine operation. The valve is vacuum operated and is controlled by a thermal vacuum switch (TVS) which passes vacuum to the valve when the coolant temperature is below the calibration value.

COOLING SYSTEM THERMOSTAT

The thermostat opening temperature is calibrated to meet the requirements of the system during engine warm-up.

IGNITION SYSTEM

The new electronic ignition system provides the high output necessary to fire a spark across the wider plug gaps to burn the leaner fuel mixtures.

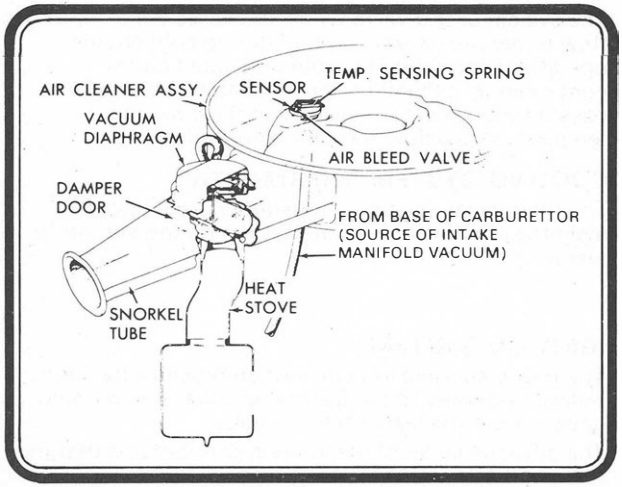
The advance curve of the ignition distributor is designed to meet the emission limits

AIR PRE-HEAT (A.P.H.) SYSTEM

This system provides a supply of pre-heated air to the carburettor until the engine compartment air temperature reaches a pre-set level.

Pre-heated air is supplied from the exhaust manifold heat stove via the hot air duct to the underside of the air cleaner assembly snorkel. A thermal vacuum valve controls the operation of a vacuum motor which operates the control damper assembly, and this regulates the amount of air supplied from the exhaust manifold stove.

The installation of this system ensures better engine response during the engine warm-up period also, leaner fuel settings can be used, which assists in reducing engine emissions.



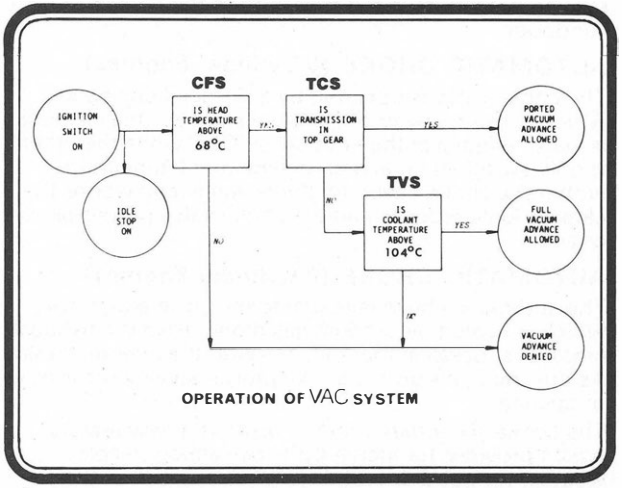
VACUUM ADVANCE CONTROL (V.A.C.) SYSTEM

The basis of this system is the control of the vacuum available to the distributor's vacuum advance mechanism dependent on operating conditions.

The system includes the following three components:—

*(a) Cold Feed Switch (C.F.S.)
*(b) Transmission Control Spark System (T.C.S.)
(c) Thermal Vacuum Switch (T.V.S.)

*Cold Feed Switch: (C.F.S.)
Vacuum advance is denied to the distributor during engine warm-up. When the cylinder heads temperature reaches 68°C the switch closes



OPERATION OF VAC SYSTEM

allowing vacuum to the Transmission Control Spark System.

*Transmission Control Spark System: (T.C.S.)
When the transmission is in top gear ported vacuum is allowed to the distributor.

Thermal Vacuum Switch: (T.V.S.)
When the cooling water temperature reaches 104°C the T.V.S. directs full vacuum to the distributor allowing the engine to run cooler at idle and in the low gears.

*The transmission control control spark system and cold feed switch are not applicable to six cylinder engines with automatic transmission.

Exhaust Gas Recirculation (E.G.R.) System

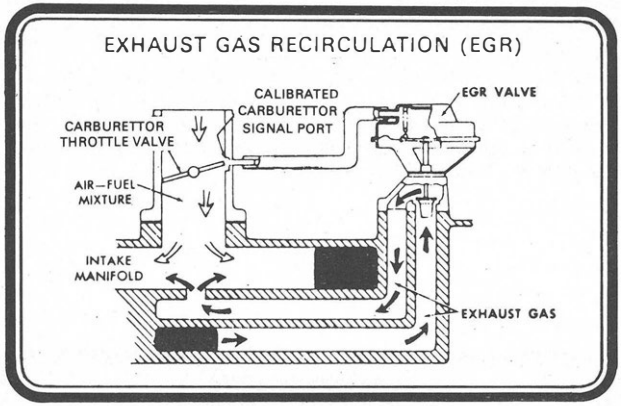
This system introduces controlled quantities of exhaust gas into the inlet manifold resulting in lower peak combustion temperatures in the combustion process which, in turn, reduces the formation of nitrogen oxides.

A thermal vacuum switch (valve) opens the vacuum line to the exhaust gas recirculation valve only after the engine coolant has reached a predetermined temperature at which time the E.G.R. valve is subject to the engine vacuum signal from the carburettor. This system is not used on 4.2 litre V8 engines when fitted with a manual transmission.

Crankcase Emissions

Emission of hydrocarbons from the engine crankcase is another source of automotive air pollution. This emission occurs in the following manner.

During the combustion process in all petrol engines,



some gases escape past the piston rings and into the crankcase. These gases consist largely of unburned fuel. This "blow-by" occurs because of the very high pressures in the combustion chambers.

Crankcase Emission Control System

Positive Crankcase Ventilation (P.C.V.) System

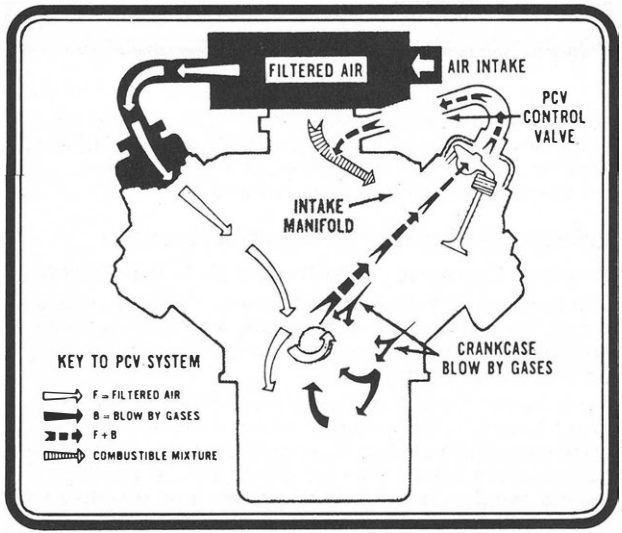
The purpose of the system is to draw the blow-by gases out of the crankcase, into the intake manifold system and thus recycle these gases through the combustion process in the cylinders.

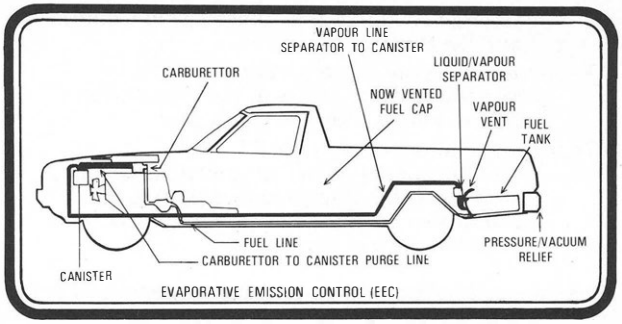
Air is drawn through a filter in the air cleaner and on down through the crankcase where it mixes with the crankcase gases caused by engine blow-by. From here the gases are drawn from the crankcase via a spring loaded, vacuum control valve into the inlet manifold to be burned in the normal combustion process.

Evaporative Emissions

Another source of emissions from automobiles is evaporation of petrol. This occurs, not only when the fuel tank is being filled, but at other times, even when the vehicle is not in operation. Special systems to control evaporation have recently been developed, and are now installed on all vehicles.

Schematic of V8 PCV System





Evaporative Emission Control (E.E.C.) System

The heart of this system is the canister in the engine compartment, which contains activated charcoal granules.

When the engine is not running, fuel vapours from the fuel tank are prevented from entering the atmosphere by the charcoal in the canister where they are adsorbed.

A vacuum purge line connects the canister to the inlet manifold via the carburettor. When the engine is running the vacuum draws air into the canister, and the adsorbed fuel vapour is drawn from the charcoal, forming a mixture with the air which is burnt in the engine combustion process.

A non-vented fuel tank cap is fitted and integral in the cap is a pressure/vacuum relief valve to cater for any differences of pressure or vacuum that may arise.

Maintenance

The required owner emission control systems maintenance operations presented in the Owner Guide and Service Manual should be performed by an

authorized G.M.H. Dealer or any other qualified service outlet which regularly performs such services.

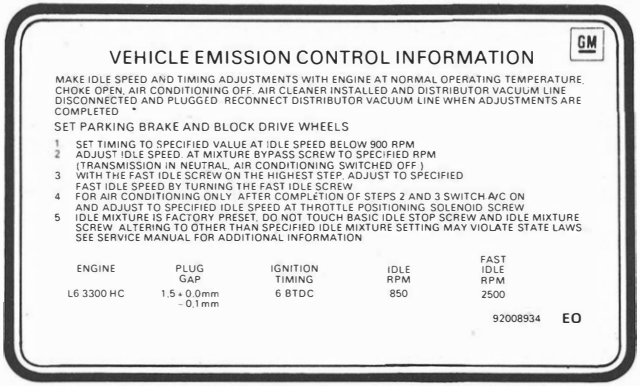
Vehicle Operations

The maintenance instructions contained in the Owner Guide, provided with the vehicle, are based on the assumption that your vehicle will be used as designed and is operated in accordance with the instructions provided in the Owner Manual.

Service manuals, providing greater detail on emission systems, are available for purchase by owners who desire to perform their own vehicle maintenance.

These are available from a G.M.H. Dealer or from:

Stan H. Earle,
46 Isabella Street,
Moorabbin 3189
Victoria



VEHICLE EMISSION CONTROL INFORMATION

MAKE IDLE SPEED AND TIMING ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE. CHOKE OPEN, AIR CONDITIONING OFF. AIR CLEANER INSTALLED AND DISTRIBUTOR VACUUM LINE DISCONNECTED AND PLUGGED. RECONNECT DISTRIBUTOR VACUUM LINE WHEN ADJUSTMENTS ARE COMPLETED.

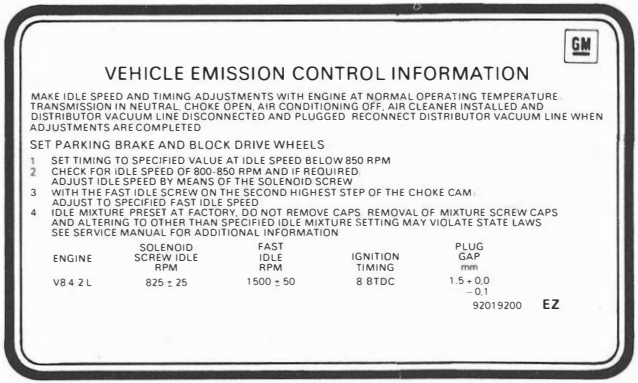
SET PARKING BRAKE AND BLOCK DRIVE WHEELS

1. SET TIMING TO SPECIFIED VALUE AT IDLE SPEED BELOW 900 RPM.
2. ADJUST IDLE SPEED, AT MIXTURE BYPASS SCREW TO SPECIFIED RPM. (TRANSMISSION IN NEUTRAL, AIR CONDITIONING SWITCHED OFF.)
3. WITH THE FAST IDLE SCREW ON THE HIGHEST STEP, ADJUST TO SPECIFIED FAST IDLE SPEED BY TURNING THE FAST IDLE SCREW.
4. FOR AIR CONDITIONING ONLY, AFTER COMPLETION OF STEPS 2 AND 3 SWITCH A/C ON AND ADJUST TO SPECIFIED IDLE SPEED AT THROTTLE POSITIONING SOLENOID SCREW.
5. IDLE MIXTURE IS FACTORY PRESET, DO NOT TOUCH BASIC IDLE STOP SCREW AND IDLE MIXTURE SCREW. ALTERING TO OTHER THAN SPECIFIED IDLE MIXTURE SETTING MAY VIOLATE STATE LAWS. SEE SERVICE MANUAL FOR ADDITIONAL INFORMATION.

ENGINE	PLUG GAP	IGNITION TIMING	IDLE RPM	FAST IDLE RPM
L6 3300 HC	1.5 + 0.0mm − 0.1mm	6 BTDC	850	2500

92008934 EO

6 Cylinder Engine (High Compression) 3.3 Litre
ALL MODELS EXCEPT N.S.W.



VEHICLE EMISSION CONTROL INFORMATION

MAKE IDLE SPEED AND TIMING ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE. TRANSMISSION IN NEUTRAL, CHOKE OPEN, AIR CONDITIONING OFF, AIR CLEANER INSTALLED AND DISTRIBUTOR VACUUM LINE DISCONNECTED AND PLUGGED. RECONNECT DISTRIBUTOR VACUUM LINE WHEN ADJUSTMENTS ARE COMPLETED.

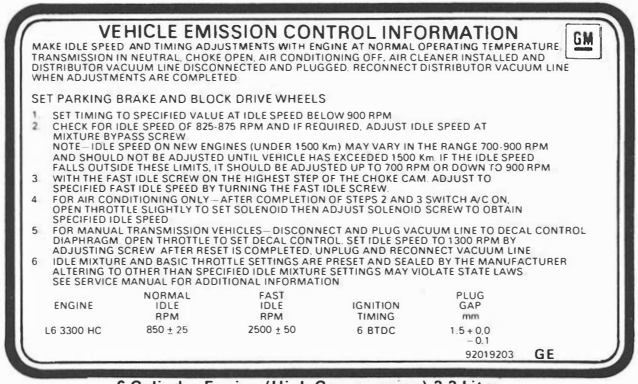
SET PARKING BRAKE AND BLOCK DRIVE WHEELS

1. SET TIMING TO SPECIFIED VALUE AT IDLE SPEED BELOW 850 RPM.
2. CHECK FOR IDLE SPEED OF 800-850 RPM AND IF REQUIRED ADJUST IDLE SPEED BY MEANS OF THE SOLENOID SCREW.
3. WITH THE FAST IDLE SCREW ON THE SECOND HIGHEST STEP OF THE CHOKE CAM ADJUST TO SPECIFIED FAST IDLE SPEED.
4. IDLE MIXTURE PRESET AT FACTORY, DO NOT REMOVE CAPS. REMOVAL OF MIXTURE SCREW CAPS AND ALTERING TO OTHER THAN SPECIFIED IDLE MIXTURE SETTING MAY VIOLATE STATE LAWS. SEE SERVICE MANUAL FOR ADDITIONAL INFORMATION.

ENGINE	SOLENOID SCREW IDLE RPM	FAST IDLE RPM	IGNITION TIMING	PLUG GAP mm
V8 4.2 L	825 ± 25	1500 ± 50	8 BTDC	1.5 + 0.0 − 0.1

92019200 EZ

4.2 Litre V8 Engine



VEHICLE EMISSION CONTROL INFORMATION

MAKE IDLE SPEED AND TIMING ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE. TRANSMISSION IN NEUTRAL, CHOKE OPEN, AIR CONDITIONING OFF, AIR CLEANER INSTALLED AND DISTRIBUTOR VACUUM LINE DISCONNECTED AND PLUGGED. RECONNECT DISTRIBUTOR VACUUM LINE WHEN ADJUSTMENTS ARE COMPLETED.

SET PARKING BRAKE AND BLOCK DRIVE WHEELS

1. SET TIMING TO SPECIFIED VALUE AT IDLE SPEED BELOW 900 RPM.
2. CHECK FOR IDLE SPEED OF 825-875 RPM AND IF REQUIRED, ADJUST IDLE SPEED AT MIXTURE BYPASS SCREW.
   NOTE – IDLE SPEED ON NEW ENGINES (UNDER 1500 Km) MAY VARY IN THE RANGE 700-900 RPM AND SHOULD NOT BE ADJUSTED UNTIL VEHICLE HAS EXCEEDED 1500 Km. IF THE IDLE SPEED FALLS OUTSIDE THESE LIMITS, IT SHOULD BE ADJUSTED UP TO 700 RPM OR DOWN TO 900 RPM.
3. WITH THE FAST IDLE SCREW ON THE HIGHEST STEP OF THE CHOKE CAM, ADJUST TO SPECIFIED FAST IDLE SPEED BY TURNING THE FAST IDLE SCREW.
4. FOR AIR CONDITIONING ONLY – AFTER COMPLETION OF STEPS 2 AND 3 SWITCH A/C ON, OPEN THROTTLE SLIGHTLY TO SET SOLENOID THEN ADJUST SOLENOID SCREW TO OBTAIN SPECIFIED IDLE SPEED.
5. FOR MANUAL TRANSMISSION VEHICLES – DISCONNECT AND PLUG VACUUM LINE TO DECAL CONTROL DIAPHRAGM. OPEN THROTTLE TO SET DECAL CONTROL SET IDLE SPEED TO 1300 RPM BY ADJUSTING SCREW. AFTER RESET IS COMPLETED, UNPLUG AND RECONNECT VACUUM LINE.
6. IDLE MIXTURE AND BASIC THROTTLE SETTINGS ARE PRESET AND SEALED BY THE MANUFACTURER ALTERING TO OTHER THAN SPECIFIED IDLE MIXTURE SETTINGS MAY VIOLATE STATE LAWS. SEE SERVICE MANUAL FOR ADDITIONAL INFORMATION.

ENGINE	NORMAL IDLE RPM	FAST IDLE RPM	IGNITION TIMING	PLUG GAP mm
L6 3300 HC	850 ± 25	2500 ± 50	6 BTDC	1.5 + 0.0 − 0.1

92019203 GE

6 Cylinder Engine (High Compression) 3.3 Litre
FOR VEHICLES SOLD IN N.S.W. ONLY

Service Replacement Parts

The emission control systems of your new vehicle were designed, built and tested using GM parts and the vehicle is certified as being in conformity with Australian Design Rules covering emissions. Accordingly, it is recommended that any replacement parts used for required maintenance services or for the repair of emission control system be new GM parts. Use of replacement parts which are not of equivalent quality may impair the effectiveness of such systems.

Engine Identification

The type and capacity of the engine fitted to your new vehicle can be easily identified by the Engine Number prefix. This is usually on the registration label or on the engine block as indicated below.

Engine Number Prefixes

Six Cylinder
WL — 3.3 Litre High Compression

Stamped on a pad above the engine mounting on the right hand side (Driver's side) of the engine.

Eight Cylinder
WR — 4.2 Litre

Stamped on a pad on the left hand side (Passenger's side) at the front of the cylinder block above the engine mounting.

Vehicle Emission Control Information Label

This label is located at the front of the left hand side MacPherson strut tower inside the engine compartment, and provides all relative specifications required to correctly tune the engine of your new vehicle.

Section 4: Owner Relations and Authorised GMH Dealers

We want you to be happy with your new Holden and with the people you deal with while you have the vehicle.

Normally, any problems which may arise with the sales transaction, operation or servicing of your vehicle will be handled by your Dealer's Sales and Service department.

We realise however that, with the best intentions, misunderstandings do occur sometimes.

If you have a problem that has not been settled to your satisfaction here's what to do:

Step 1:

Discuss the problem with one of the Dealer's management people. If you feel you haven't got satisfaction from the Sales Manager or Service Manager — go to the General Manager or the Dealer himself.

Step 2:

If it seems that no-one at the dealership can help fully, write to the Zone Owner Relations Manager in your State outlining your problem and including your name, address and telephone number; the vehicle model number and vehicle identification number; the vehicle delivery date and odometer reading and the Dealer's name and address. This information will be on your Warranty Certificate.

Step 3:

By now you should have satisfaction. If not, you can write to the National Owner Relations Manager, GMH Sales Pty Ltd, P.O. Box 5431CC, Melbourne 3001.

Always try to sort things out at the Dealership. Owner Relations managers will have to refer the problem back to the Dealer.

Owner Relations Managers

QUEENSLAND
General Motors-Holden's Sales Pty. Ltd.,
Box 728, G.P.O.,
BRISBANE, QLD. 4001.

NEW SOUTH WALES AND AUSTRALIAN CAPITAL TERRITORY
General Motors-Holden's Sales Pty. Ltd.,
Box 4239, G.P.O.,
SYDNEY, N.S.W. 2001.

VICTORIA AND TASMANIA
General Motors-Holden's Sales Pty. Ltd.,
Box 1273 L, G.P.O.,
MELBOURNE, VIC. 3001.

SOUTH AUSTRALIA AND NORTHERN TERRITORY
General Motors-Holden's Sales Pty. Ltd.,
Box 221, P.O.,
ELIZABETH, S.A. 5112.

WESTERN AUSTRALIA
General Motors-Holden's Sales Pty. Ltd.,
P.O. Box 426,
WEST PERTH, W.A. 6005.

Authorised GMH Dealers

(Note: Dealership names and locations listed are effective as at 1/4/82. These may change from time to time without notice)

NEW SOUTH WALES — Metropolitan Dealers

ARNCLIFFE
Suttons Motors (Arncliffe) Pty. Ltd.,
93 Princes Highway

ASHFIELD
Muirs Motors (Ashfield) Pty. Ltd.,
252 Parramatta Road

BALGOWLAH
Ross Hannon Holden
164 Condamine Street

BANKSTOWN
Boyded Bankstown
236-240 South Terrace

BAULKHAM HILLS
Tony Packard Holden
Cnr. Victoria Avenue & Windsor Road

BELMONT
Young & Green (Belmont) Pty. Ltd.,
444 Pacific Highway

BLACKTOWN
Mitchell & Townsend,
125 Main Street

CABRAMATTA
Ron Hodgson Holden
266 Hume Highway

CAMPBELLTOWN
Clintons Motors Pty. Ltd.,
3-17 Queen Street

CARDIFF
Brian Kelly Holden
35-39 Macquarie Road

CHATSWOOD
Sundell Holden
815-843 Pacific Highway

CHULLORA
Suttons Motors (Chullora) Pty. Ltd.,
Cnr. Hume Highway & Waterloo Road

CROW'S NEST
J. N. Caldwell (Holdings) Pty. Ltd.,
1 Alexander Street

DEE WHY
Graham Patching Holden
Cnr. May and Mooramba Roads

GOSFORD
MKL Gosford Motors Pty. Ltd.,
131 Henry Parry Drive

GOSFORD
Noble Motors
Pacific Highway

HOMEBUSH
Suttons Motors (Homebush)
112 Parramatta Road

HORNSBY
John A. Gilbert Pty. Ltd.,
90 Pacific Highway

KINGSFORD
John Pelligrini Holden
263-271 Anzac Parade

KINGSWOOD
W. L. Chapman Pty. Ltd.,
107-119 Gt. Western Highway

LAKEMBA
Nash Holden
1018 Canterbury Road

LIVERPOOL
A. C. McGrath & Company,
Cnr. Castlereagh St. & Hume Highway

LIVERPOOL
Pat Cullen's Garage,
324-360 Hume Highway

MIRANDA
Greg Ball Holden
1-3 Kiora Road

MOSMAN
Norman G. Booth Properties Ltd.,
501 Military Road

NEWCASTLE
Young & Green Pty. Ltd.,
708 Hunter Street

NEWPORT BEACH
Sundell Holden
Barrenjoey Road

PADSTOW
Purnell Bros. Holden
19 Davies Road

PARRAMATTA
Fair Deal Car Sales Parramatta
65 Church Street

PARRAMATTA
Hillsdon's Pty. Ltd.,
87 Church Street

PENNANT HILLS
Les Vagg Holden
351-355 Pennant Hills Road

PICTON
Clintons Motors Pty. Ltd.,
Cnr. Hume Highway & Henry Street

RANDWICK
Boyded Randwick,
265 Avoca Street

ROCKDALE
C. V. Holland
571 Princes Highway

RYDE
Muirs Motors (Ryde) Pty. Ltd.,
603-605 Victoria Road

ST. MARY'S
Lance Motors Pty. Ltd.,
Corner Glossop & Harris Streets

SPRINGWOOD
Kerry's Motors Pty. Ltd.,
28 Great Western Highway

TORONTO
Young & Green (Toronto) Pty. Ltd.,
Carey Street

WINDSOR
Hawkesbury Valley Motors,
122 George Street.

WARILLA
Wilson's Warilla Pty. Ltd.,
29 Shellharbour Road

WOLLONGONG
Dwyers Pty. Ltd.,
31-33 Crown Street

WOLLONGONG
Boyded (North Wollongong) Pty. Ltd.,
Cnr. Keira & Smith Streets

WYONG
W. M. Holden
Pacific Highway

NEW SOUTH WALES — Country Dealers & Service Dealers

Consult your local Yellow Pages under Motor Cars—New for Addresses and Telephone Numbers.

- ADELONG
- ALBURY
- ARMIDALE
- BALLINA
- BARADINE
- BARHAM
- BARRABA

- BATHURST
- BEGA
- BELLINGEN
- BLAYNEY
- BOMBALA
- BOURKE
- BOWRAL
- BREWARRINA
- BROKEN HILL
- CANOWINDRA
- CASINO
- CESSNOCK
- COBAR
- COFF'S HARBOUR
- CONDOBOLIN
- COOLAMON
- COOMA
- COONABARABRAN
- COONAMBLE
- COOTAMUNDRA
- COROWA
- COWRA
- CROOKWELL
- CULCAIRN
- DENILIQUIN
- DORRIGO
- DUBBO
- DUNGOG
- EDEN
- FINLEY
- FORBES
- GILGANDRA
- GLEN INNES
- GLOUCESTER
- GOULBURN
- GRAFTON
- GRENFELL
- GRIFFITH
- GULARGAMBONE
- GUNDAGAI
- GUNNEDAH
- GUNNING
- GUYRA
- HARDEN
- HAY
- HOLBROOK
- INVERELL
- JERILDERIE
- JUNEE
- KANDOS
- KATOOMBA
- KEMPSEY
- KIAMA
- KURRI KURRI
- KYOGLE
- LAKE CARGELLIGO
- LEETON
- LISMORE
- LITHGOW
- MACKSVILLE
- MAITLAND
- MILTON
- MOLONG
- MOREE
- MORUYA
- MOSS VALE
- MUDGEE
- MULLUMBIMBY
- MUNGINDI
- MURWILLUMBAH
- MUSWELLBROOK
- NARRABRI
- NARRANDERA
- NARROMINE
- NOWRA
- NYNGAN
- ORANGE
- PARKES
- PEAK HILL
- PORT MACQUARIE
- QUIRINDI
- SINGLETON
- TAMWORTH
- TAREE
- TEMORA
- TENTERFIELD
- TOTTENHAM
- TRANGIE
- TULLAMORE
- TUMBARUMBA
- TUMUT
- TWEED HEADS
- WAGGA
- WALCHA
- WALLA WALLA
- WALGETT
- WARIALDA
- WARREN
- WAUCHOPE
- WELLINGTON
- WEST WYALONG
- WINGHAM
- WOODENBONG
- YASS
- YOUNG

VICTORIA — Metropolitan Dealers

BENTLEIGH
Boyanton Holden
280 Centre Road

BERWICK
Ross Holden
Princes Highway

BRAYBROOK
Kevin Dennis Holden
272 Ballarat Road

BUNDOORA
Tony Davies Holden
413 Grimshaw Street

BURWOOD
Dustings Holden
1200 Toorak Road

CAULFIELD
Booran Holden
1049 Glenhuntly Road

CHELSEA
Harrison Holden
370 Nepean Highway

CHELTENHAM
Balmoral Holden
1212 Nepean Highway

DANDENONG
Blanchard Investments Pty. Ltd.,
Princes Highway

DONCASTER
Lance Dixon Holden
601 Doncaster Road

ELSTERNWICK
Reg. Hunt Motors Pty. Ltd.,
77 Nepean Highway

ESSENDON
Preston Motors (Essendon) Pty. Ltd.,
201-211 Keilor Road

FAWKNER
M. & G. Mantello Holden
1263 Sydney Road

FERNTREE GULLY
Neilson Holden F.T.G.,
980 Burwood Road

FOOTSCRAY
Alan Mance Holden
435 Barkly Street

FRANKSTON
Bayside Holden
140 Dandenong Road

GEELONG
R. & B. Smith Pty. Ltd.,
510 Moorabool Street

GEELONG
Winter & Taylor (Sales) Pty. Ltd.,
23 Cavendish Street

GLEN WAVERLEY
Geoff Brady Holden
565-577 Springvale Road

HASTINGS
McRae Motors Pty. Ltd.,
762 Flinders Road

HEIDELBERG WEST
Northpoint Holden
66 Bell Street

LILYDALE
Noel Dight Holden
Main Street

MORNINGTON
Peninsula Holden
Cnr Nepean Highway & Tyabb Road

NORTH MELBOURNE
Bob Jane Southern Motors Pty. Ltd.,
19 Flemington Road

OAKLEIGH
Garry & Warren Smith Pty. Ltd.,
1575 Dandenong Road

PRESTON
Graham Hunt Holden
518 High Street

RINGWOOD
Bill Patterson Holden
45-57 Maroondah Highway

SOUTH MELBOURNE
John Martin Holden
132 Sturt Street

WERRIBEE
Ballan Holden
Princes Highway

WEST MELBOURNE
Reg Hunt Holden
577 King Street

VICTORIA — Country Dealers & Service Dealers

Consult your local Yellow Pages under Motor Cars—New for Addresses and Telephone Numbers.

- ALEXANDRA
- ARARAT
- BACCHUS MARSH
- BAIRNSDALE
- BALLARAT
- BENALLA
- BENDIGO
- BIRCHIP
- BOORT
- CAMPERDOWN
- CASTERTON
- CASTLEMAINE
- CHARLTON
- COBRAM
- COHUNA
- COLAC
- COLERAINE
- CORRYONG
- DAYLESFORD
- DERRINALLUM
- DIMBOOLA
- DONALD
- DROUIN
- ECHUCA
- EUROA
- FOSTER
- HAMILTON
- HEATHCOTE
- HOPETOUN
- HORSHAM
- KANIVA
- KERANG
- KOOWEERUP
- KORUMBURRA
- KYABRAM
- KYNETON
- LEONGATHA
- MAFFRA
- MANSFIELD
- MARYBOROUGH
- MILDURA
- MINYIP
- MORTLAKE
- MORWELL
- MURRAYVILLE
- NAGAMBIE
- NHILL
- NULLAWIL
- NYAH
- ORBOST
- OUYEN
- PORTLAND
- QUAMBATOOK
- RAINBOW
- ROCHESTER
- RUTHERGLEN
- SALE
- SEA LAKE
- SEYMOUR
- SHEPPARTON
- ST. ARNAUD
- STAWELL
- SWAN HILL
- TALLANGATTA
- TIMBOON
- TRARALGON
- UNDERBOOL
- WANGARATTA
- WARBURTON
- WARRACKNABEAL
- WARRNAMBOOL
- WODONGA
- WONTHAGGI
- WYCHEPROOF
- YARRAM
- YARRAWONGA

AUSTRALIAN CAPITAL TERRITORY

BELCONNEN
John Wright Holden
Josephson Street

BRADDON
Beazley & Bruce (ACT) Pty. Ltd.
44 Mort Street

PHILLIP
Commonwealth Motors Pty. Ltd.
158 Melrose Drive

QUEENSLAND — Metropolitan Dealers

ASPLEY
Zupps (Aspley) Pty. Ltd.,
1442 Gympie Road

CLEVELAND
Russell Smith Holden
Queen Street

MOOROOKA
John Sivyer Holden
1060 Ipswich Road

MT. GRAVATT
Zupps Motors Pty. Ltd.,
1310 Logan Road

NEWSTEAD
Eagers Retail Pty. Ltd.,
95 Breakfast Creek Road

NUNDAH
Eagers (Northside)
1319 New Sandgate Road

OXLEY
Wayne Hill Holden,
2193 Ipswich Road

PETRIE
North Pine Motors Pty. Ltd.,
Gympie Road

REDCLIFFE
Village Holden
425 Elizabeth Avenue

SPRINGWOOD
Midways Holden
Pacific Highway

WINDSOR
Leach Motors
146 Newmarket Road

WOOLOONGABBA,
Eagers (Southside),
40 Logan Road

WYNNUM
Doug Barton Holden
200 Tingal Road

QUEENSLAND — Country Dealers & Service Dealers

Consult your local Yellow Pages under Motor Cars—New for Addresses and Telephone Numbers.

- ATHERTON
- AUGATHELLA
- AYR
- BEAUDESERT
- BEENLEIGH
- BEERWAH
- BILOELA
- BOWEN
- BUNDABERG
- CABOOLTURE
- CAIRNS
- CALOUNDRA
- CHARLEVILLE
- CHARTERS TOWERS
- CLERMONT
- CLONCURRY
- CUNNAMULLA
- DALBY
- DIRRANBANDI
- EMERALD
- GATTON
- GAYNDAH
- GLADSTONE
- GOONDIWINDI
- GYMPIE
- INGHAM
- INNISFAIL
- IPSWICH
- JANDOWAE
- JULIA CREEK
- KILCOY
- KINGAROY
- LAIDLEY
- LONGREACH
- MACKAY
- MAREEBA
- MARYBOROUGH
- MILES
- MONTO
- MOURA
- MT. ISA
- MURGON
- NAMBOUR
- NANANGO
- NOOSA HEADS
- PROSERPINE
- QUILPIE
- ROCKHAMPTON
- ROMA
- SOUTHPORT
- SPRINGSURE
- STANTHORPE
- ST. GEORGE
- TARA
- TEXAS

- TOOWOOMBA
- TOWNSVILLE
- TULLY
- WARWICK
- WINTON

SOUTH AUSTRALIA — Metropolitan Dealers

ADELAIDE
City Holden,
203-221 Grenfell Street

ELIZABETH
Peter Page Holden
Elizabeth Way

GLENELG
John H. Ellers Pty. Ltd.,
282 Brighton Road

MALVERN
Claridge Motors Pty. Ltd.,
361-367 Unley Road

MILE END
Freeman Motors Ltd.,
71 West Beach Road

PORT ADELAIDE
Smith Motor Co. Pty. Ltd.,
171 Commercial Road

VALLEY VIEW
Plaza Holden
817-839 North East Road

SOUTH AUSTRALIA — Country Dealers & Service Dealers

Consult your local Yellow Pages under Motor Cars—New for Addresses and Telephone Numbers.

- BALAKLAVA
- BERRI
- BORDERTOWN
- BURRA
- CEDUNA
- CLEVE
- CRYSTAL BROOK
- CUMMINS
- GLADSTONE
- JAMESTOWN
- KADINA
- KEITH
- KINGSCOTE
- KINGSTON
- LOXTON
- MAITLAND
- MALLALA
- MENINGIE
- MILLICENT
- MINLATON
- MT. BARKER
- MT. GAMBIER
- MURRAY BRIDGE
- NARACOORTE
- ORRORO0
- PETERBOROUGH
- PORT LINCOLN
- PORT PIRIE
- QUORN
- RENMARK
- STRATHALBYN
- TANUNDA
- VICTOR HARBOR
- WAIKERIE
- WHYALLA
- WUDINNA
- YANKALILLA

WESTERN AUSTRALIA — Metropolitan Dealers

CANNINGTON
Brian Gardner Holden
1308 Albany Highway

FREMANTLE
Shack Motors
59 Queen Victoria Street

GOSNELLS
Lance Gibbons Holden
2325 Albany Highway

MELVILLE
Melville Motors Pty. Ltd.,
532-536 Canning Highway

MIDLAND
John Goldie Holden
161 Great Eastern Highway

MORLEY
Metro Motors Pty. Ltd.
212 Walter Road

NAVAL BASE
Shack Motors Cockburn Pty. Ltd.,
Rockingham Road

OSBORNE PARK
North City
Cnr. Scarborough Beach Road and Harbourne Street

PERTH
City Motors
505 Newcastle Street

VICTORIA PARK
Young's Holden
529 Albany Highway

WANNEROO
Phoenix Holden
316 Berriman Drive

TASMANIA — Metropolitan & Country Dealers & Service Dealers

HOBART
Motors Pty. Ltd.,
179 Macquarie Street

BURNIE
Motors Pty. Ltd.,
54 Marine Terrace

DEVONPORT
Motors Pty. Ltd.,
24 Best Street

KING ISLAND
King Island Motors Pty. Ltd.,
Netherby Road Currie

LAUNCESTON
Motors Pty. Ltd.,
165 Brisbane Street

SMITHTON
Motors Pty. Ltd.,
16 Nelson Street

ULVERSTONE
Motors Pty. Ltd.,
99 Reibey Street

WESTERN AUSTRALIA — Country Dealers & Service Dealers

Consult your local Yellow Pages under Motor Cars—New for addresses and Telephone Numbers.

- ALBANY
- BEVERLEY
- BOYUP BROOK
- BROOKTON
- BRUCE ROCK
- BUNBURY
- BUSSELTON
- CARNARVON
- COLLIE
- CORRIGIN
- CRANBROOK
- DALWALLINU
- ESPERANCE
- GERALDTON
- GNOWANGERUP
- GOOMALLING
- KALGOORLIE
- KATANNING
- KELLERBERRIN
- KUNUNURRA
- MANDURAH
- MANJIMUP
- MERREDIN
- MOORA
- MORAWA
- MT. BARKER
- MULLEWA
- NAREMBEEN
- NARROGIN
- NORTHAM
- PINGELLY
- PORT HEDLAND
- QUAIRADING
- THREE SPRINGS
- WAGIN
- WONGAN HILLS
- WYALKATCHEM

NORTHERN TERRITORY — Dealers

ALICE SPRINGS
Kittle Bros. (Alice Springs) Pty. Ltd.,
Wills Terrace

DARWIN
Suttons Motors (Darwin) Pty. Ltd.,
Cnr. Mitchell and Knuckey Streets

Section 5

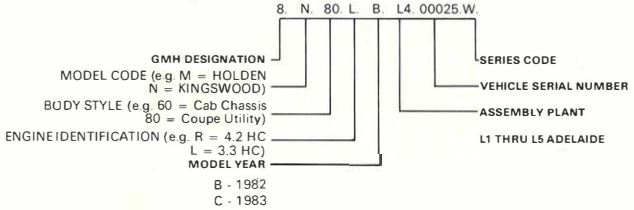
Specifications

Serial Numbers

V.I.N. Plate
(Vehicle Identification Number)

Attached to the top shroud ledge of the dash panel on the right hand side (Driver's side) under the engine hood.

The table below gives a breakdown of the V.I.N. and the meaning of each section.



Vehicle Serial Number (Chassis Number)

Stamped on the top face of the right hand frame member at the front end—access under the engine hood.

Body and Option Identification Plate

Attached to the top ledge of the dash panel on the left hand side (Passenger's side) under the engine hood. Plate shows body styles, body serial number, paint and trim colour combination, paint number, Engine, Transmission and Axle Ratio Options.

The Built Date is defined as "The date of manufacture" by calendar month and year in which the body shell and power train sub-assemblies are conjoined and the vehicle is driven or moved from the production line.

Engine Number Prefixes

Six Cylinder

WL — 3.3 litre High compression

Stamped on a pad above the engine mounting on the right hand side (Driver's side) of the engine.

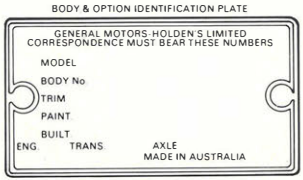
Eight Cylinder

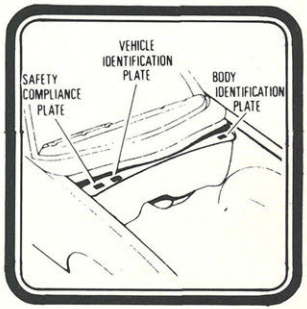
WR — 4.2 litre

Stamped on a pad on the left hand side (Passenger's side) at the front of the cylinder block above the engine mounting.

Safety Compliance Plate

Attached to the top ledge of the dash panel on the right hand side (Driver's side) under the engine hood. Shows vehicle Series, Model, Style, Month and Year of production.





Model Identification

Model Range	Model Identification	V.I.N. Code Number
Holden Utility	8WM80	8M80
Holden Panel Van	8WM70	8M70
Holden Chassis Cab	8WM60	8M60
Kingswood Utility	8WN80	8N80

Wheel Nut Torques

Recommended Wheel Nut Torque is 100-108 Nm.

Vehicle Dimensions

Overall Length	millimetres
Holden Utility	4945.5
Holden Panel Van	4945.5
Holden Chassis Cab	4987
Kingswood Utility	4988
Overall Width	
Models other than Kingswood	1877
Kingswood Utility	1898
Overall Height	
Holden Utility	1395
Holden Panel Van	1603
Holden Chassis Cab	1420
Kingswood Utility	1395
Wheel Base	
Holden Utility	2895.5
Holden Panel Van	2895.5
Holden Chassis Cab	3058
Kingswood Utility	2895.5
Nominal Track	
All Models (Standard Steel Wheels)	
Front	1520.5
Rear	1530
Minimum Ground Clearance	
Holden Utility	167
Holden Panel Van	167
Holden Chassis Cab	172
Kingswood Utility	166

ENGINE DATA

ENGINE DESIGNATION	3.3 Litre	4.2 Litre
Piston Disp. Nom.—Cu. Cms.	3298	4142
Comp. Ratio	8.8:1	9.0:1
Petrol Research Octane Rating	97	97
Number of Cylinders	Six	Eight
Bore/Stroke mm	92.1 x 82.5	92.1 x 77.8
Rated Taxable H.P. (RAC)	31.5	42.1
Max Power Kilowatts Din at R.P.M.	83 @ 4000	100 @ 4200
Max Torque NM Din at R.P.M.	231 @ 2400	269 @ 2000
Cylinder Numbering Front to Rear Firing Order	1 2 3 4 5 6 1 5 3 6 2 4	RH Bank 1 3 5 7 LH Bank 2 4 6 8 1 2 7 8 4 5 6 3

Capacities

Engine Oil

Litres

6 Cylinder—Service Refill		(b)	3.4
Add for Filter—Type	PF10	(b)	0.9
Type	X96	(b)	0.3
8 Cylinder—Service Refill		(b)	4.0
Add for Filter—Type	PF10	(b)	0.9
—Type	X96	(b)	0.3

Manual Transmission

4- Speed All Synchromesh			2.0

Automatic Transmission

Trimatic

Service Refill — Approximate		(b)	1.7
Dry 6 Cylinder	(a)	(b)	6.1
8 Cylinder	(a)	(b)	8.7

Rear Axle

All Models		(a)	1.4

(a)—Only at Overhaul
(b)—Use oil level for final check

Cooling System

Litres

6 Cylinder—	approx.	8.5
8 Cylinder—4.2 litre	approx.	12.0
Pressure Rating of Radiator Cap		103 kPa

Fuel Tank

All Models	70.4 litres

Clearances and Settings

Engine Type	6 Cylinder	8 Cylinder
Distributor	—Brakeless —Non Adjustable	
Valve Clearance —Inlet (Hot) —Exhaust (Hot)	 Zero (Non Adjustable) Zero (Non Adjustable)	
Spark Plug Gap	1.5 mm	

Carburettor Mixture

The mixture control of the carburettor has been sealed and the idling speed set to comply with the Australian Design Rules. The reason for this is to conform to anti-pollution measures.
Your GMH Dealer has the full information concerning the foregoing.

Fuse System

Fuses

The fuse block is located behind a flush fitting plastic cover at the lower right hand corner of the instrument panel, adjacent to the hood release. To gain access to the fuses remove the cover by using the recess provided. The fuses can be identified by referring to the fuse layout on the reverse side of the cover.

If, after replacing a burnt-out fuse, the new fuse burns out, this indicates that the fuse is still overloaded. The cause of the fault should be located and rectified, preferably by a GMH Dealer.

Fusible Link

In order to reduce the possibility of a fire, whether due to electrical causes or an accident, the wiring harness is protected by the inclusion of a fusible link, located in the harness next to the starter motor. In case of a short circuit, the link will melt internally, disconnecting the battery by the fusing action. The encasing insulation has been specially designed to withstand the temperature and to contain the fused wires. Thus the fusible link provides a combined fuse and fire protection feature.

Thermal Circuit Interruptor

The headlamp circuit is protected by a thermal interruptor incorporated in the lighting switch. If the current load is excessive, due to a short circuit for example, contact points in the interruptor open and close rapidly thus making and breaking the circuit, and so reducing the current sufficiently to prevent damage to the wiring. This action continues until the fault is eliminated. During this action of the interruptor there is usually sufficient light maintained to enable the vehicle to be driven to the nearest service station. If the interruptor does come into action the cause should be located and the trouble rectified as soon as possible.

Device or Circuit Protected	Feed Control	Fuse Capacity
Turn Signal Lights Windshield Washer Windshield Wiper Power Antenna	ACC or ON on Ignition Switch	15 amps.
Instrument Lights Auto. Trans. Console Light	ON on light switch	3 amps.
Cigarette Lighter.	ACC or ON on Ignition Switch	25 amps.
Brake Warning Light Back-Up Lamps Gauges/Indicators	ON on Ignition Switch	15 amps.
Instrument Panel Lights. Licence Plate Lamps Tail Lamps and Parking Lamps. Interior Lamps	Battery	15 amps.
Horns/Clock Stop Lamps Headlamp Flash	Battery	15 amps.
Radio.	ACC or ON on Ignition Switch	3 amps.
Heater/Demister & Air Conditioner (where fitted) Dwell Control	ACC or ON on Ignition Switch	15 amps. 25 amps. If A/C fitted
Headlamps	Battery	Circuit Interruptor in Switch

Headlamp and Bulb Specifications

Light Description	Part No.	Watts
Round Headlamp — 17844 Sealed Beam	2823661	75-50 watt
Rectangular Headlamp — Reflector	VS14695	
Rectangular Headlamp — Lens L H S	VS14691	
Rectangular Headlamp — Lens R H S	VS14690	
Bulb — Quartz Halogen Headlamp	11071361	55-60 watt
Front Turn Signal Lamp	9417866	32 cp
Front Parking Lamp	9421330	2 cp
Rear Turn and Stop Lamp (Double Filament) Van—Ute	9428902	—
Rear Turn Signal and Back-up Van—Ute	9417866	32 cp
Rear Turn Signal Chassis/Cab	11062779	
Rear Stop and Tail Lamp Chassis/Cab	11062789	
Rear Back-up Lamp Chassis/Cab	11047259	
Headlamp High Beam Indicator Warning Lamp	9421330	2 cp
Instrument Illumination Lamp	9421330	2 cp
Alternator Tell Tale Lamp	9421330	2 cp
Oil Pressure Tell Tale Lamp	9421330	2 cp
Ash Tray, Cigarette Lighter Lamp	11062449	—
Heater and Acces. Illumination Lamp	9417863	2 cp
Dome Lamp	9414045	—
Turn Signal Tell Tale Lamp	9421330	2 cp
Licence Plate Lamp	SP1467	6 watts
Glove Box Lamp	9421330	2 cp
Brake Warning and Park Brake Tell Tale Lamp	9421330	2 cp
Automatic Transmission Selector (Column) Lamp	9421330	2 cp
Automatic Transmission Selector (Console) Lamp	9417863	2 cp

N.B. Some of the bulbs listed are subject to model or option selection.

Bulb Replacement

Headlamps

This should be done by your GMH Dealer or a competent mechanic as the lights may need to be re-aimed.

Front Parking and Turn Signal Lamps

Access to these lamps is from the engine compartment. Remove the bulk socket and wire by turning clockwise and then remove the bulb.

Insert new bulb and replace by reversing the sequence ensuring that the turn signal lamp socket sealing cap is properly located.

Rear Stop/Tail, Turn Signal and Back-up Lamps (Van & Utility)

Unscrew the 6 Phillips screws and remove the lens. Slightly depress the respective bulb, rotate and remove from the socket.

Insert new bulb and replace lens.

Rear Number Plate Lamps

Utility and Panel Van

Unscrew the two cross-head screws which secure the socket holder bracket. The bulb, which is a normal bayonet type can then be removed by using a twisting motion to dis-engage the lugs and then pulling it straight out of its socket.

Chassis Cab

This model has two units supported at the rear of the frame with a single combined lens. Access to the bulbs can be gained by removal, from the outside of the two crosshead screws which retain the combined lens. The bulbs, can then be removed and replaced.

Instrument Panel and Console Lamps

These should be replaced by your GMH Dealer or a competent mechanic.

Interior Dome Lamp

To remove squeeze together the long sides of the plastic lens (not the plastic surround) to gain access to the bulb. The bulb is of the festoon type and can be removed by pulling it straight out from its retaining clips.

Section 6: Appearance, Maintenance and Service

Paintwork

The paint on your Holden is finished in acrylic lacquer and will stay bright and new-looking provided you wash and wax it regularly, using approved products. Weekly washing is recommended if the vehicle is being used constantly or if it is not parked under cover.

Before you wash the paintwork, thoroughly wash in and around the front and rear windows and check that door drain holes, tailgate drain holes and rocker sill vents are clean. Hose off any heavy dirt on the glass, but leave final cleaning of the glass until last.

Washing tips

Use either cold or warm water — preferably running.

Use clean chamois cloths, sponges or rags (old, clean linen is better than new material for glass).

Don't wash your vehicle in bright sunlight — it will streak.

Grease and oil can be removed with a little kerosene or white spirits. Flush with water afterwards.

If petrol is spilled during refilling, flush with water immediately.

Be sure that your cleaner, polish or wax is suitable for acrylic finishes. AC Delco Wash & Wax from your GMH Dealer is highly recommended.

Insect spots can be removed with a mixture of 220 grams of baking soda in 2 litres of water. Flush clean afterwards. New tyre look can be restored with AC Delco Tyre Black from your GMH Dealer.

Tarnished chrome responds well to AC Delco Polishing Liquid.

CLEANING OF INTERIOR

Care and Cleaning of Upholstery

Dust and dirt particles which accumulate on the surface of the interior trim should be removed every few weeks — more often with constant hard driving. This can be done readily with a vacuum cleaner. Before attempting to remove spots and stains from an upholstery fabric, it is necessary to determine as accurately as possible:

1. The type of fabric.
2. The nature and age of the stain.
3. The effect of the stain removal agent upon the colour, structure and general appearance of the trim material.

It is essential that stains be removed from the trim material as soon as possible after they have been made. If they are allowed to remain on the fabric for any length of time they very often become oxidised or set, and removal becomes difficult, if not impossible.

Cleaning P.V.C. Coated Fabrics

Vinyl (P.V.C.) coated fabrics are used for seating, headlining and auxiliary trimming. The grades used vary according to their function. P.V.C. fabrics are generally made with fabric bases upon which synthetic resins are applied. Care of P.V.C. fabrics is a relatively simple but important matter. The surface should be wiped over with a dry cloth during the regular cleaning of the vehicle. Should dirt accumulate and become embedded in the material pattern the following procedure is recommended.

1. Using lukewarm water and soap, work up thick suds on a piece of cheesecloth, and apply to the surface. A soft bristle brush can be used to advantage to remove stubborn stains or dirt embedded in the grain of the material.
2. The operation should be repeated using only a damp cloth and no soap.
3. The trim should then be wiped dry with a soft cloth.

The above cleaning instructions also apply to the rubber floor mats.

IMPORTANT: Where stubborn stains on P.V.C. fail to respond to the above methods, a light application of AC Delco Upholstery Cleaner and Deodorant (Part Number M37222) with a soft cloth will invariably prove satisfactory.
Do not use cleaner excessively.

Cleaning Cloth Trim Material

Where the seats in your vehicle are upholstered with cloth, the following instructions should be observed.

Most loose dirt and dust can be removed by a vacuum cleaner or a soft brush. **Do not use a Whisk Broom or a Coarse Hair Brush.** If normal soiling should take place, it is recommended that the fabric be sponged lightly with warm water containing a detergent and a small amount of ammonia. The fabric should then be rubbed lightly, and if necessary, sponged again to remove anything stubborn. Soak up excess fluid with dry cloth. AC Delco Upholstery Cleaner may be used to advantage, but should be used sparingly.

Cleaning Carpets

Thoroughly brush or vacuum the carpet. In many instances the carpet may require no further cleaning. If the carpet is extremely soiled, thoroughly vacuum it to remove loose dirt; then using AC Delco Car Care Upholstery Cleaner, clean approximately one square foot at a time. After each area is cleaned, remove as much of

the cleaner as possible with a vacuum cleaner. After cleaning the carpet, use an air hose to fluff the carpet, pile, then dry the carpet. After the carpet is completely dried, use an air hose to again fluff the carpet pile.

Cleaning Seat Belts

Cleaning of the seat belts can be carried out by using a mild non-abrasive soap and lukewarm water. After washing be sure to thoroughly sponge the washing solution out of the belts.

CAUTION: Do not bleach or dye belts since this may severely weaken belts.

Ash Trays

To remove, open ash tray, depress the spring loading tab in centre and carefully withdraw. The tray can then be emptied and cleaned. To replace, reverse the procedure.

Cleaning Glass

Glass

The interior glass areas of the vehicle should be cleaned using a non-abrasive household detergent and clean, soft cloth.
Care must be taken when cleaning inside the rear windscreen so as not to damage the heating element.

CAUTION: Many cleaners may be toxic or flammable, or may cause damage to the interior. When cleaning the interior, do not use volatile cleaning solvents such as: acetone, lacquer thinners, enamel reducers, nail polish removers; or such cleaning materials as laundry soaps, bleaches or reducing agents. Never use carbon tetracholride, gasoline or naphtha for any cleaning purpose.

IMPORTANT: Be sure the vehicle is well ventilated while using any cleaning agents. Follow the manufacturer's recommendations when using such products.

CLEANING OF EXTERIOR

CAUTION: Care should be used when moving the vehicle after washing, in case water has affected the brakes.

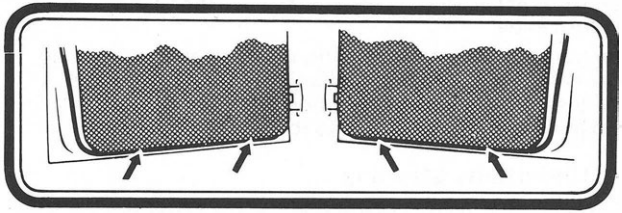
Frequent hosing and washing of the vehicle cannot be overstressed as the most effective precaution against corrosion. Other items requiring attention before washing the vehicle are as follows:—

1. Underbody Cleaning

The effects of salts and other corrosive materials from road surfaces can result in accelerated rusting and deterioration of underbody components such as brake and fuel lines, frame, underbody floor pan, exhaust system, brackets, parking brake cables. These corrosive effects, however, can be reduced by periodic hosing of the underbody with plain water whenever the vehicle is being washed. In geographic areas having a heavy concentration of corrosive materials it is recommended that the complete underbody be inspected and washed at least once each year, preferably after a winter's exposure. Particular attention should be given to cleaning out underbody members where dirt and other foreign materials may have collected.

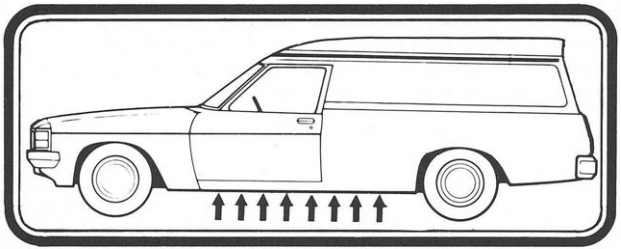
2. Door Drain Holes

It is important that the drain holes at the bottom of the door panels are checked to make sure that they are free of dirt and foreign matter, which could trap water inside the panels. Clogged drain holes can be cleaned with a small screwdriver and these drain holes are angled back towards the rear of the vehicle. (Refer illustration.) below.)



3. Rocker Sill Vents

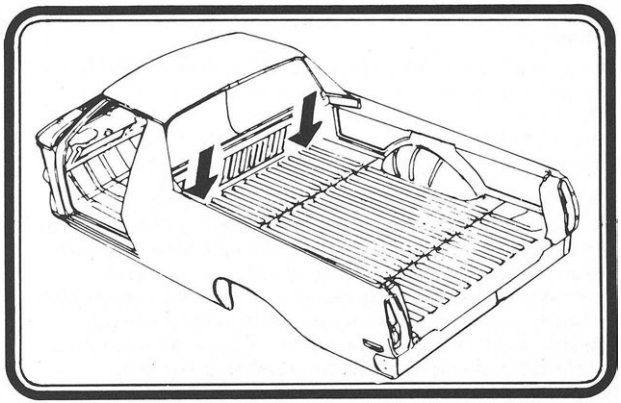
In all models there are vents which should be regularly checked to see that they are clear of blockage, using a blunt ended instrument. These vents are formed as cut-outs in the sheet metal along the bottom edge of the rocker sill, being evenly placed between the front and rear wheel arches and face inward, towards the centre of the vehicle. (Refer illustration below.)



4. Utility Tonneau Floor Drain Holes

On utility models there are two drain holes, located at each forward corner of the loading area just behind the cabin section, which assist in draining away any water that may collect on the tonneau floor.

Regular cleaning, using a hose and a blunt probe will ensure that the holes remain clear of all leaves and dirt etc., and so avoid the possibility of water accumulating in the loading area. (Refer illustration below.)



Glass

Special care should be taken to avoid scratching the glass when it is being cleaned. If it is cleaned at the same time as the rest of the vehicle, there is a possibility that particles of grit will cause fine scratches. An accumulation of these on the windshield can make night driving very unpleasant. Flush off any heavy mud deposits on the glass when washing the body, but leave the final cleaning and polishing until afterwards.
Each section of glass should then be washed in turn, making sure that the water, its container and the sponge are quite clean and free from grit. If the glass is very dirty, a little household ammonia mixed with warm water will help. Clean old linen cloth is better than new material for polishing glass.

Insect Spots

Insect spots on the paint finished parts of the vehicle can be easily washed off by using a solution containing 2 litres of water in which approx. 220 grams of baking soda (Bicarbonate of Soda) has been dissolved. Flush the washed parts with clean water. After washing and drying, park the vehicle in a shaded area.

Washing

The acrylic lacquer finish on your vehicle is superior to ordinary lacquers and will stay bright and new looking for years with little or no polishing, provided it is given a reasonable amount of regular washing to keep off road grime.

To preserve the original paint finish of the vehicle, it is essential that it is kept clean by frequent washing. Washing not only removes dirt and road grime that settles on the vehicle, but also dilutes acides which accompany such grime, in particular, salt from air or sea spray encountered in coastal areas which often become trapped in crevices. Tree sap, road tar, excretion from insects and industrial fall out often contain harmful chemicals and other foreign matter that may permanently damage the paint finish of the vehicle. these should be removed without delay, using an effective removal agent.

Regular Washing

If the vehicle is in continuous use, it should be washed at least once a week with either cold or warm water (preferably running water), using clean chamois leathers, sponges or rags free from dirt or grit likely to scratch the paint finish. It is good practice to first hose the vehicle to remove as much of the grit and grime as possible before swabbing the surface. Do not wash the vehicle under bright sunlight when high temperatures are being experienced, as this will resullt in a streaky, watermarked finish.

AC Delco Wash and Wax (Part No. M37226) loosens road grime to make washing easier and leaves paint shining clean.

NOTES:

1. Calcium chloride and other salts, road oil and tar, tree sap, chemicals from factory chimneys and other foreign matter may damage any known automobile finish if allowed to remain in contact with the paint film.
2. Some chemical cleaners used for removing road oils and tars from painted surfaces have been found to be detrimental to acrylic finishes. When puchasing a cleaner, polish or wax, ensure that it can be safely used on an acrylic finish.
3. Grease and oil, and even tar if it's fresh, can be removed from the finish with a little Kerosene or White Spirits. As a precaution against staining, wash and polish as soon as possible the area from which the foreign matter has been removed.

IMPORTANT: If petrol is spilt on the paint finish when refilling, owners are advised to ensure that it is flushed off with clean water immediately. The reason is that petrols currently in use have a tendency to stain or soften new paint finish during the weathering out period, particularly when the vehicle is exposed to high temperatures.

Paint Work Inspection

Regular inspection of the vehicle should be made for scratch marks, cracks or damaged areas, all of which could develop rust and thus affect paint finish. Any deep scratches, cracks or breakdown in the finish should be repaired without delay. Care should be taken to ensure that any rusting is counteracted immediately, otherwise rust "creep" will extend beyond the damaged area. This applies particularly in sub-tropical areas or coastal districts, where the moist or salt-laden atmosphere accelerates rusting if it is allowed to develop through neglect. The paint finish of the vehicle gives a very high degree of protection against the weather, but it should be realised that wear and deterioration occur when the vehicle is exposed to elements for prolonged periods.

The vehicle therefore should be garaged whenever possible.

Chromium Plated Parts

Generally, a rub with a clean soft cloth will be all that is necessary to remove dust from the chromium plated parts. However, if the chromium is covered with dead insects or mud, it should be washed with warm soapy water and then cleaned with AC Delco Polishing Liquid (Part Number M37221). This polish should also be used if the chromium shows signs of tarnishing. Do not use ordinary metal polishes as they may contain abrasives which would ruin the plating.

Polishing

Even though the acrylic lacquer finish on your vehicle is more durable than ordinary lacquers, under certain conditions you may wish to polish your vehicle to provide maximum protecton against road dirt and industrial fall out etc. Also, the application of a polish may be required to remove foreign matter which is not normally removed from vehicles by washing. Over a period of time, such foreign matter may build up on the paint surface to the detriment of its overall appearance.

Do not attempt to apply a polish without first washing to remove existing loose grit, surface dirt, dust or grease, etc.

Either AC Delco Polishing Liquid (Part No. M37221) or AC Delco Polishing Cream (Part No. M37220) will quickly and easily impart a deep, rich shine when used as directed on the container.

Tyres

Sponging with cold water is all that is necessary for normal cleaning of the tyres. Oil and grease can, and should, be removed with soap and water or detergent. For tar or other substances, a mild abrasive, such as mechanics' hand soap or kitchen cleaning powder, may be used if necessary. thoroughly wash the tyres with water to finish. Petrol must not be used for cleaning tyres.

New Tyre look can be restored by using Tyre Black.

GM Replacement Parts and Accessories

GM Parts & Accessories Division of General Motors-Holden's Ltd. is established to distribute GM Parts through Authorized GMH Dealers located throughout the Commonwealth from whom you can obtain new parts as required.

GM Parts are manufactured to the high standards of quality established for General Motors-Holden's vehicles — to the correct specifications and of the same materials as the original parts on your vehicle. They are, therefore, guaranteed, and it is definitely in your interest to specify them.

Oil

CAUTION: As with any machinery, extreme care should be taken when carrying out any inspections or maintenance job. If you have any doubts about your own ability, please have the job done by a qualified mechanic.

Initial Oil Fill

A high quality SE oil was installed in your engine at the factory. It is not necessary to change this factory-installed oil prior to the recommended normal change period. However, check the oil level more frequently during the running-in period since higher oil consumption is normal until the piston rings become seated.

NOTE: Non-detergent and other low quality oils are specifically not recommended. Only the use of SE engine oils and proper oil and filter change intervals assure you of continued proper lubrication of the engine.

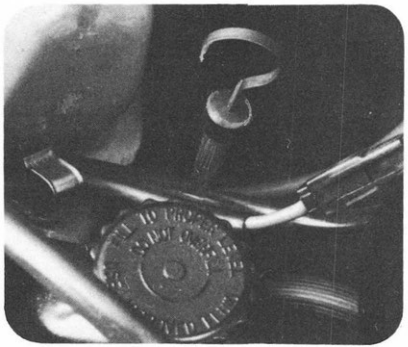
Maintaining Oil Level

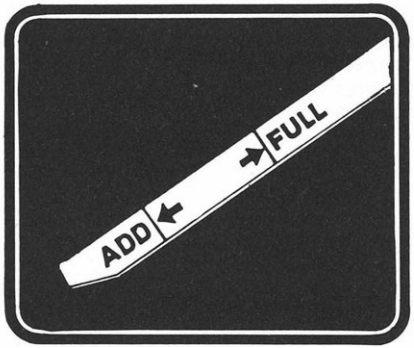
The oil level indicator is marked ADD and FULL. The oil level should be maintained between the two markings, neither going above the FULL marking nor under the ADD marking. Check the oil level frequently and add oil when necessary.

To check the oil level accurately, the vehicle must first be on level ground and the engine should be stopped for at least ten minutes. Checking the oil level too soon after stopping the eingine will not allow sufficient time for oil, which has circulated to the upper parts of the engine, to drain back into the engine oil pan, and consequently, a false low reading will be obtained. Topped up under these conditions will result in the oil pan being over-filled.

Remove the indicator, wipe it clean with clean cloth or paper before reinserting it firmly. Pause for a second then withdraw the indicator to check the reading of the oil level.

The distance between the ADD and FULL marks represent approximately 1 litre on all engines. Oil level should be checked more often during the running-in period since somewhat higher oil consumption could be experienced until piston rings become seated.





Oil Consumption

In many cases, it is erroneously thought that engines should not use any noticeable amount of oil between oil changes. In actual fact every internal combustion engine should use a certain amount of oil to act as a lubricating and cooling agent especially during the running-in period.

There are several factors that contribute to oil consumption, apart from mechanical malfunction, that should be noted, and these are: the type of oil, the seating of piston rings, the oil level, and the conditions under which the vehicle is operated.

Running-in

The initial factory-fill oil should remain in the engine for the recommended period. (Refer this section.) Oil consumption may be high during the running-in period.

Lubrication

An engine is dependent on oil to lubricate the cylinder walls, pistons, rings and valve stems. A film of oil is left on the cylinder walls and burned on the next firing stroke while the film on the valve stems is drawn into the combustion chamber and burned. These quantities, while small, explain why an engine does use some oil.

Oil Level

Maintaining a proper oil level is also an important factor in controlling oil consumption. An overfull crankcase allows the reciprocating parts of an engine to splash oil on to the cylinder walls in quantities greater than the piston rings can control. This excess oil will be drawn into the combustion chambers and burned.

Overfilling the crankcase can result if the oil level indicator markings are not understood. (Refer to previous notes.)

Dilution

Probably the most prevalent complaint of oil consumption comes from the motorist whose vehicle is driven at below normal operating temperatures for long periods of time. The oil becomes diluted by fuel and moisture which settle in the crankcase, raising the oil level and creating a false reading on the oil level indicator. For example, in a vehicle that has accummulated 1500 kilometres of city operation and has consumed a normal amount of oil, the level may not have dropped from the FULL mark, due to dilution. If this vehicle is then driven for some distance at highway speeds on a warm day, the dilution elements evaporate, lowering the oil level and the motorist assumes the oil is being lost.

Speed Consumption

Sustained high engine speeds will increase oil consumption because higher speeds increase engine temperatures which lower oil viscosity and allow more oil to reach the combustion chamber.

If it is considered that the above possibilities can be accounted for but excessive oil consumption appears to continue, then it is recommended that you discuss the situation with a GMH Dealer.

NOTE: Non-detergent and other low quality oils are specifically not recommended. The use of break-in oils, tune-up compounds, friction-reducing compounds and other supplemental additives are not recommended; their use will only increase operating costs.

REMINDER: The use of proper engine oils and observing oil change intervals are your best assurance of continued reliability and performance from the engine of your vehicle.

In the event of an operational problem, consult your GMH Dealer for advice before using supplemental additives.

Oil Filter Replacement

The full-flow oil filter, with non-return check-valve, filters all the engine oil delivered by the oil pump. For this reason the interval of filter change is very important.

The oil filter should be replaced every six months or 10,000 kilometres whichever occurs first, independent of oil change intervals.

Under prolonged dusty driving conditions it is recommended that the oil filter be replaced more often.

NOTE: After the oil filter has been replaced, additional oil must be added:—

6 cylinder Engines—Type PF10—0.9 Litre
Type X96—0.3 Litre

8 cylinder Engines—Type PF10—0.9 Litre
—Type X96—0.3 Litre

Always use AC brand of oil filters, for replacement purposes.

Fuel Requirements

The vehicle is designed to operated on a good quality clean fuel and 97 octane rating. The use of a fuel which is too low in anti-knock property will result in "Detonation" (a metallic rapping noise generated during the combustion process). If "Detonation" persists, consult an authorized GMH Dealer. Continued operation of an engine which exhibits symptoms of "Detonation", may result in damage for which General Motors-Holden's is not responsible under the terms of the Warranty.

Oil Change Intervals

The amount of time between changes depends a lot on what you use the vehicle for, and where it is driven.

The table indicates oil change intervals for cars used "normally".

If you usually drive on dusty roads; if you often take long trips; or — strangely enough — if you only use your car for to and from the office or the shops, you will need to change the oil more often. Say every month or every 5,000 kilometres.

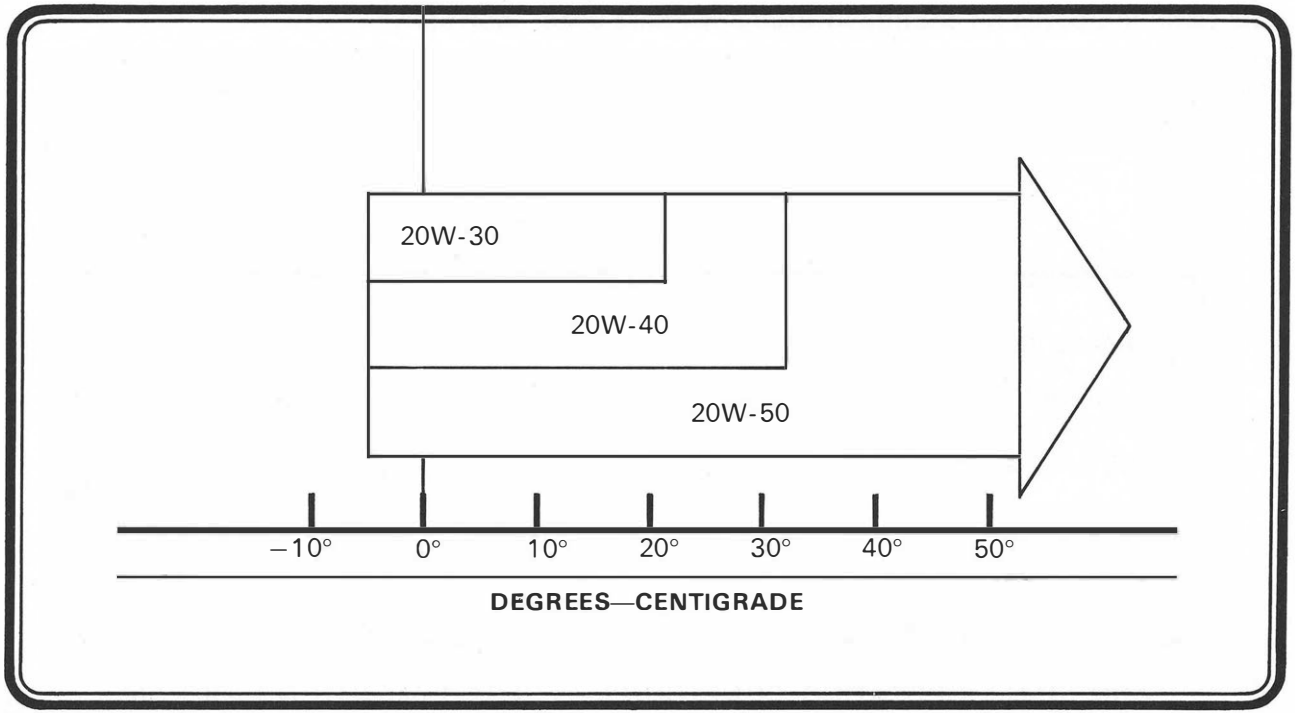
NORMAL OPERATING CONDITIONS

Prevailing Daytime Temperatures	Regular Oil Change Interval
ABOVE 10°C	EVERY 6 MONTH OR 10,000 KM — WHICHEVER OCCURS FIRST
BELOW 10°C	EVERY 1 MONTH OR 5000 KM — WHICHEVER OCCURS FIRST

ABNORMAL OPERATING CONDITIONS — EVERY 1 MONTH OR 5000 KM

Engine Oil Grades

The chart below is a guide to choosing a suitable oil.



Transmission Oils

Manual Transmission

Check the oil level every six months or 10,000 kilometres whichever comes first — and add oil to the level of the plug hole if necessary.

The oil should be changed at the six months or 10,000 service, then every two years or 40,000 kilometres.

Automatic Transmission

Use only DEXRON ® products. These are available from your GMH Dealer.

To check the fluid level:

First drive the car for several kilometres making frequent stops and starts. (A shopping trip would be ideal.)

Now pull up, put the car in PARK and leave the engine running while you check the dip stick. This is found under the bonnet near the drivers side rear of the engine compartment.

If the level is at or below the ADD mark, add fluid until the stick reads FULL — it will take about .5 litre. Don't overfill.

Transmission fluid should be changed every two years or 40,000 km., or more often if you drive in the city in summer or use it to pull a caravan, or if you often leave it idling — like a taxi or patrol car.

This interval should be halved for heavy usage.

SERVICING

As all adjustments, cleaning and servicing of automatic transmissions requires specialized equipment and knowledge it is recommended that these operations be performed by an authorized GMH Dealer.

Rear Axle Oil

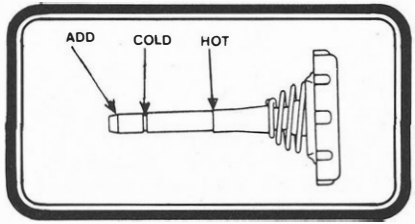
This should be checked every six months or 10,000 km whichever comes first. If necessary, add oil to bring the level of the oil to the plug hole.

Power Steering

At each oil change period the fluid level in the pump reservoir should be checked using the fluid level indicator which is attached to the filler cap. This operation can be carried out when the fluid is either cold or hot.

NOTE: When checking the fluid level the engine must be stopped with the front wheels in the straight ahead position. If the reading is taken before vehicle is operated (i.e. when the fluid is cold) the fluid level should be at the COLD mark on the indicator. If the reading is taken after the vehicle has been operated for at least 10 to 15 minutes (i.e. when the fluid is hot) the fluid level should be at the HOT mark on the indicator.

After checking the fluid level and it is found to be at or below the ADD mark on the indicator use DEXRON II automatic transmission fluid to raise the level to the appropriate mark as described above.



Lubricants and Filters

Chassis

Engine Oil
Use oil to HN1455 specifications. (Refer page 83-87 for grades and application.)

Power Steering Fluid
DEXRON II Automatic Transmission Fluid, GM9985286.

Manual Transmission Oil
Multigrade to HN1046 specification.

Automatic Transmission Fluid
DEXRON II automatic transmission fluid only, identified also by Part No. 9985286 should be used for topping up or service refills. *DEXRON is a registered trademark of General Motors.

Rear Axle Oil
Use Multipurpose Hypoid gear oil in this order of preference, HN 1386 or HN 1187 or HN 1181. Limited Slip Differential — where fitted use oil to GM HN1561 specification only.

Front Suspension and Steering Ball Joints
Use a Lithium grease with 10% Molybdenum disulphide, HN1271.

Front Wheel Bearings
Grease to HN 1227 specification.

Brake Fluid
Fluid to HN1796 specification.

Control Systems
Brake and Clutch Pedal Pivots, Clutch Linkage, Transmission Control Linkage, Accelerator Pivots, Parking Brake System, Pivot and Guides. Grease to HN 1225 (LG-2) specification.

Body

Normal use of a vehicle causes metal-to-metal movement at certain points in the body. Noise, excessive wear and improper operation at these points will result when a protective film of lubricant is not provided. Servicing and lubrication should be an integral part of the lubrication service and should be checked out as required every 6 months or 10,000 kilometres.

Powdered Graphite

(Apply through key aperture)

Door Lock Cylinder
Instrument Panel Compartment Lock Cylinder
Rear Compartment Lid Lock Cylinder
End-Gate Lock Cylinder

Non-Staining Grease or Zinc Oxide Grease

(Use sparingly on parts likely to be contacted by clothing)

Engine Hood Catch and Lock
Rear Compartment Hinges
Engine Hood and Door Hinges
End-Gate Locking Mechanism and Hinges

Solidoil

(Use sparingly on working surfaces)

Door Lock Fork
Door Lock Striker Bolt

IMPORTANT: Remove all lubricants that may have dropped or spread onto the external paint finish.

Cooling System

This must be serviced regularly if the engine is to operate efficiently.

Corrosion Protection

To provide corrosion protection to the engine cooling system the GMH Corrosion Inhibitor (HN1791) or Anti-freeze (GM1825M) should be used. All additions of coolant to the system should be made with inhibitor or anti-freeze concentrate prediluted with water of high purity.

Do not mix the two coolants. Follow the directions on the pack when using either concentrate. Replace the coolant annually.

If you live in an area where water has a high level of mineral or chemical content, use rainwater or distilled water.

If you need to use borewater in an emergency — change it for clean water as soon as possible.

Follow the directions on the pack when adding a corrision inhibitor.

Radiator Pressure Cap

Because of this cap your engine can work at over 100°C without boiling.

If your engine should overheat, refer to instructions on page 70.

Filling the cooling system

With the engine cold fill the radiator until coolant enters the reservoir via the over flow outlet tube. Fit the radiator cap and start the engine.

During the warm-up period coolant will be expelled from the radiator into the reservoir due to expansion.

When the engine is at normal operating temperature check the coolant level in the reservoir and, if required, top up to the "MAX. Level when hot" position shown on the reservoir. SUBSEQUENT topping-up of the reservoir, with the engine hot, will ensure that the radiator is always full without having to remove the radiator pressure cap.

Draining and Flushing

Every twelve months or 20,000 km drain and refill the radiator and add a GMH approved corrosive inhibitor coolant. To drain the radiator— loosen the cap, locate the lower radiator hose and loosen the clamp fastening this hose to the radiator. Now disconnect this hose.

8-Cyl. Remove the hexagon head plugs midway along each side of cylinder block, above oil pan flange.

REMINDER: Replace and properly tighten all drain points before refilling.

Do not use cleaning chemicals to loosen scale unless the cooling system is afterwards thoroughly reverse flushed, otherwise loosened scale may clog the radiator water passages.

For complete removal of loose sediment and sludge from the radiator and water jacket, pressure flushing with an air and water gun is recommended, and as this method of flushing requires special equipment we suggest you have this work carried out by your GMH Dealer.

CAUTION: Draining of the main radiator and cylinder case assembly will not drain the water out of the heater radiator; therefore, the use of Anti-Freeze will eliminate the risk of a damaged heater core.

Corrosive Inhibitor

HN-1791 Part No. M38866.

It is recommended that engine coolant system corrosion inhibitor HN-1791 be added as follows after regular draining:

8 Cylinder Engines — 140 ml.

These quantities are only applicable when water of a high purity is used.

Anti-freeze Fluid

This is essential if your car is run for any length of time in snow areas.

The recommended brand—GM1825M—can be supplied by your GMH Dealer.

It contains an anti-corrosion element as well.

If this product is not available and you need to park overnight in a snow area you must drian the main radiator and cylinder case. Otherwise, your radiator may burts or the cylinder case crack.

The recommended anti-freeze fluid is permanent type (ethylene glycol) GM1825M, which can be obtained through a GMH Dealer who, before adding, should make a thorough check of the cooling system.

NOTE: Anti-freeze provides the action of a corrosion inhibitor, eliminating the necessity for a separate additive.

Where a vehicle is to be parked overnight or operated for any length of time in regions where temperatures of 0°C or below are encounted (e.g.—snow areas), the recommended brand of anti-freeze fluid should be used in the cooling system in accordance with the instructions specified.

COLD WEATHER DRAINING

If the recommended brand of anti-freeze fluid is not available, the radiator, and cylinder case, MUST be drained before parking to prevent the possible bursting of the radiator, or cracking of the cylinder block which can occur if the coolant freezes.

Brake Master Cylinder

Every 6 months or 10,000 kilometres check the fluid level in the master cylinder. The fluid level visible through the reservoir should be maintained between the MIN and MAX level markings. If the fluid is between these levels do not remove master cylinder cap. If the master cylinder requires constant topping up it could indicate that a malfunction exists in which case it should be immediately brought to the attention of your servicing GMH Dealer.

Battery (12 volt)

The battery is located in a metal cradle mounted on the left hand fender skirt in the engine compartment and the negative (−) terminal is "grounded". Never disconnect the battery or generator when the engine is running. Always connect Positive (+) to Positive (+), Negative (−) to Negative (−) whenever a battery charger is used.

Fluid Level

The battery fluid level should be maintained at 1 cm above the plates by adding distilled water. Distilled water will be required more frequently in summer than in winter. It is a good plan to check the fluid level at about 1 month intervals in Summer and two months in Winter. When long daylight runs are made, water may need to be added still more frequently. Do NOT overfill, particularly when cold, as subsequent operation at higher temperatures and on long distance driving may cause loss of acid. Keep all battery terminals clean and tight.

When cleaning batteries, wash first with a dilute ammonia or soda solution to neutralize any acid present. Then flush off with clean water. Care must be taken to keep the vent plugs tight so that the neutralizing solution does not enter any cells. Dry off the affected area of the body, battery mounting and retainer, then repaint with paint resistant to sulphuric acid. After reconnecting battery cables, apply a thin coating of petroleum jelly to the battery posts and cable clamps to help retard corrosion.

CAUTION: Never expose a battery to open flame or electric spark — battery action generates hydrogen gas which is flammable and explosive. Don't allow battery fluid to contact skin, eyes, fabrics, or painted surfaces — battery fluid is a sulphuric acid solution which could cause serious personal injury or property damage. Flush any contacted area immediately with water. Wear eye protection such as industrial safety spectacles or goggles when working on or near a battery. Remove rings, metal watchbands and other metal jewellery before jump starting or working around a battery, and be careful in using metal tools — if such metal should contact the positive battery terminal (or metal in contact with it) and any other metal on the vehicle, a short circuit may occur which could cause personal injury. Batteries and battery acid should always be kept out of the reach of children.

Air Cleaner

The air cleaner element should be removed and cleaned every 6 months or 10,000 km and replaced every 24 months or 40,000 km. If the vehicle is operating in extremely dusty conditions for any length of time the air cleaner should be checked and cleaned more frequently.

Ensure that the thermal vacuum signal hose is connected to the carburettor and air cleaner when re-installing the air cleaner.

CAUTION: Do not remove the engine air cleaner unless temporary removal is necessary during repair or maintenance of the vehicle. When the air cleaner is removed backfiring can cause fire in the engine compartment.

Engine Ventilation Filter

The engine ventilation filter is located in the air cleaner cover.

Every 12 months or 20,000 kilometres clean the engine ventilation intake filter with kerosene or a suitable solvent. Dry with compressed air.

EVAPORATIVE CONTROL SYSTEM

Every 24 months or 40,000 kilometres check all fuel and vapour lines and hoses for proper connections and correct routing as well as condition. Remove canister and check for cracks or damage. Replace damaged or deteriorated parts as necessary. Replace filter in lower section of canister.

WINDSHIELD NOTES

Windshield Cleanliness

It is important, at all times, that the windshield surface be maintained in a clean condition so that the wiper blades may be as effective as possible in wiping clean the surface.

Use of the windshield washer and Optikleen washer solvent will assist in removing dirt and dust particularly when driving at a time when no rain is falling; however, every opportunity should be taken to wipe or wash the windshield by hand (most Service Stations have such a service today as a courtesy item).

Abrasive materials must never be used to remove a build-up of road scum, etc., as a scratched windshield will cause difficulty in achieving proper vision, particularly in night driving. Therefore, after the windshield has been cleaned with a wet spong etc., it should be wiped dry with a soft, lint free cloth or even a ball of newspaper.

WIPER WASHER OPERATIONS

Wiper Blades — Cleaning

Much of the oil road scum thrown up onto the windshield glass, causing smearing when the wiper is switched on, transfers onto the wiper blade. Many owners, whilst they methodically clean the windshield glass, omit to clean the wiper blades and consequently smearing of the glass re-appears immediately the wiper blades are set in motion. The blades can be cleaned by simply lifting them off the windshield glass and then using warm water and a recognised washing fluid. If so desired, the wiper blade can be removed from the arm for cleaning purposes by simply disengaging it from the arm in accordance with the following instructions:—

1. Lift up tab at the end of the arm and remove blade sideways.
2. To replace, slide the blade pin into the hole in the arm clip, noting an audible click.

Washer Reservoir

A plastic reservoir containing liquid for the windshield washer is mounted in the engine compartment. It is suggested that when checking the radiator coolant level, the washer reservoir be checked also. For a crystal clear view Optikleen Washer Solvent (Part Number M37068) can be used by adding from the graduated container, the recommended proportion.

CAUTION: Do not operate the wiper blades by hand as this may damage the wiper drive mechanism.

In dry conditions, if the wiper blades are used to clean dust and dirt from the windshield always use the washer system to wet the windshield. Ensure that the windshield washer reservoir is checked regularly all the year round.

Should the wiper blades be frozen to the windshield, it is imperative that they be lifted off and freed by hand before switching on the windshield wiper system.

Tyres

Inside the lid of your glove box you will find a chart showing correct tyre inflation pressures for your vehicle under different operating conditions.

Always check tyre pressure when the tyres are cold, and always use a tyre pressure gauge. Your eye can deceive.

Tyre Pressure Recommendations

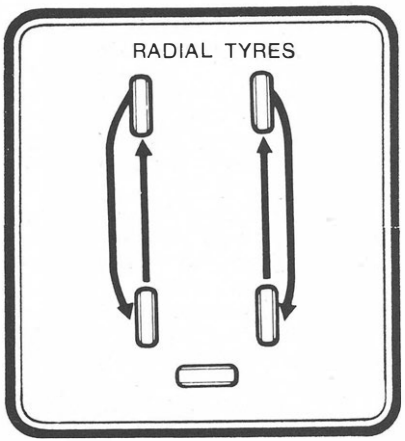
1. Tyre pressures should be checked when the tyres are cold (when the vehicle has been standing for 3 hours or more, or driven less than 2 kilometres).
2. Tyre inflation pressure may increase as much as 30 kPa (4 psi) when hot, (after the vehicle has been driven 15 kilometres or at speeds of more than 95 km/h). DO NOT reduce pressures to compensate for this build up. As a guide for checking warm/hot tyres under all conditions, allow pressure to read 30 kPa above that recommended.
3. It is recommended that the pressures are checked at least weekly. For constant long distance or rough road travelling daily checking is recommended. To maximise the protection of tyres on vehicles operating for prolonged times over rough roads, i.e. particularly in outback conditions, it is recommended that the cold tyre inflation pressure recommended for high speed operation at maximum load condition as shown on the tyre placard is used.
4. Do not forget the spare tyre: It is advisable to maintain the spare at the **maximum recommended tyre inflation pressure** listed on the placard.

Tyre Rotation

If no abnormal or uneven wear is evident, if you have not experienced any vibration, tyres need not be rotated.

Front tyres are more prone to wear on the shoulder while rear tyres wear more on the crown. Wear can be evened out by rotating the tyres.

Check them at the 5,000 km inspection, then at intervals of 10,000 km. Your GMH dealer will be able to diagnose any unusual signs of wear and can also balance the wheels and tyres for you.



Tyre Speeds

The speed ratings of a tyre are indicated by the following letters:

On bias-ply (conventional) tyres —

W — 135 km/h
— — 150 km/h
L — 160 km/h
S — 175 km/h
H — 200 km/h
*Winter tread

On radial-ply tyres —

W — 135 km/h
— — 170 km/h
S — 180 km/h
H — 210 km/h

Tyre Replacement

Use only tyres recommended on the chart inside the glove box.

Don't mix cross ply and radial ply tyres on your vehicle and don't mix radial ply tyres with other types of tyres. New tyres should be fitted in pairs to the front but if replacing only one tyre, pair it with the least worn of the old tyres.

And if you replace all tyres with tyres of a different size, your speedometer readings may be affected. Have the car checked afterwards.

Tyres with a higher speed rating and/or with a maximum load rating in excess of that listed on the tyre placard for tyre size listed are also acceptable as replacements provided they are fitted to a suitable rim size.

For example —

	BASE TYRE	OPTIONAL
8WM60 (Cab/Chassis)	19SR14LT 8 ply 935 kg (2050 lb)	F78-14LT 10 ply 955 kg (2080 lbs)
8WM70 (Holden Van)	FR78S14 4 ply 680 kg (1500 lb)	NO OPTION
8WM70 (Holden Van) (XU4, 500 kg Payload Option)	ER78S14 6 ply 680 kg (1400 lbs)	ER70H14 6 ply 680 kg (1400 lbs)
8WM80 (Holden Ute)	AS FOR VAN	AS FOR VAN
8WN80 (Kingswood Ute)	AS FOR VAN	AS FOR VAN

Uneven or abnormal tyre wear is usually the result of incorrect inflation pressure, improper wheel alignment, wheels being out of balance, or poor driving habits. The original equipment tyres incorporate built-in tread wear bars which act as indicators to assist in determining when the tyres have worn to the point of needing immediate replacement.

When the wear bars appear, tyre replacement should not be delayed, in the interests of safety.

Radial Ply Tyres

Radial Ply Tyres have radial marked on them. Because of the stiffening belt under the tread the ride characteristics of Radial Ply Tyres may be somewhat different from that of conventional tyres.

The under-inflated appearance of the radial tyre is normal.

Tyres used at maximum speeds must be in good condition and not retreaded or regrooved. Refer to the chart inside your glove box for appropriate tyre pressures.

When driving in very rough country, radials should be inflated to maximum pressures to avoid damage to the sidewalls.

Heavy Treads

Caution must be exercised when using tyres with heavy treads, including tyres designed to gain traction in bad weather conditions. At sustained high speeds, this type of tyre will run at higher temperatures than standard tyres and consequently should only be operated within the limits recommended by the manufacturer. Any doubts concerning the fitness of the tyres on your vehicle for the purpose you require should be referred to your GMH Dealer, who will be pleased to advise.

Tyres and Fast Motoring

It should be noted that all the maximum speed recommendations require the following:

The tyres must be in

1. good condition, the walls and treads being free of cuts and abrasions.
2. treads must not be excessively worn, tread pattern should still be visible over the entire tread surface.
3. the tyres should not be retreaded or regrooved.
4. the tyre pressures should be as shown on the Tyre Placard for loading and speed operation.

SUGGESTED GUIDE FOR CHECKING HOT TYRES —

As a guide for checking warm/hot tyre "under all conditions", allow pressure to read 30kPa above that recommended for cold tyre.

Tyre Traction

CAUTION: A decrease in driving, cornering, and braking traction occurs when water, snow, ice, gravel, or other material is on the road surface. Driving practices and vehicle speed should be adjusted to the road conditions.

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as hydro-planing, may cause partial or complete loss of traction, which adversely affects vehicle control and stopping ability. To reduce the possibility of traction loss, the following precautions should be observed:

1. Reduce speed levels during rainstorms or when roads are slushy and if the road has standing water or puddles.
2. Replace tyres when tread wear indicators are visible.
3. Check that tyres are properly inflated for speed range and vehicle loading.

Tyre Damage and Repair

Tyres with cuts, splits or cracks deep enough to expose the fabric, should be replaced. Bulges also indicate internal damage, and these tyres should also be replaced. Tyres with doubtful damage should be removed from the wheel and examined by a competent person.

If a pressure loss occurs while driving, do not attempt to drive on the deflated tyre more than is necessary to stop safely. Driving even a short distance on a deflated tyre can damage it beyond repair.

When puncturing objects are removed, repairs will have to be made according to the recommendations of the tyre manufacturer.

It should always be remembered that a tyre which has been repaired will not be able to be operated safely at the rated maximum speed and due care should be taken.

Replacement Wheels

When replacing wheels for any reason, care should be taken to ensure that the wheels are equivalent to those removed in diameter, rim width and offset.

Service and Maintenance

Owner Maintenance and Responsibility

The following items should be checked weekly between services:

- Battery Fluid level
- Engine Oil level
- Cooling system level (radiator)
- Brake master cylinder fluid level
- Windshield washer reservoir level
- Battery terminals (for corrosion)
- Tyre pressures
- Condition of tyres

It is your responsibility to have your car serviced regularly and to ensure that the mechanic has attended to all points listed for that particular service. Not to do so may affect your warranty.

Service Dealer's Responsibility

Your Service Dealer must attend to all items listed for any particular service and must see that the validation coupon is signed.

Service coupons are in this book in the following section.

CAUTION: If you have any doubts about your own ability, please have the job done by a qualified mechanic.

Owner's Responsibility

Normal maintenance services, as listed in this servicing schedule contained on pages 101 and 102 in this Handbook, and replacement of service items, are the responsibility of the Owner and as such are NOT considered, under the provisions of the New Vehicle Warranty, to be rectification of defects in material and workmanship.

Items such as wheel alignment, brake adjustment as a result of lining wear, etc., which may require servicing due to fair wear and tear, will be carried out at the owner's cost.

We strongly recommend that you read the Warranty Certificate at the front of this handbook, so that you are conversant with your entitlements.

Water and atmospheric conditions, varying road surfaces, individual driving habits and vehicle usage, greatly contribute to the need for constant maintenance services to promote efficient vehicle operation. (Refer over.)

Operating Conditions

Normal Conditions

The maintenance instructions contained in this publication are based on the assumption that the vehicle will be used as designed and is operated in accordance with the instruction provided in the owner manual.

Extreme Conditions

Extreme operating can be described as that where a vehicle operates continually for a period of 1 month or 1500 kilometres under the following conditions:

Condition

1 Dust, dirt, loose road metal.
2 Muddy and wet areas.
3 Cold weather — below 10°C.
4 Stop-start, as experienced in inner city driving.
5 Caravan or Trailer hauling.

In such circumstances it is suggested that the following items be serviced more frequently than at the periods recommended in the Maintenance Plan.

Conditions	Items
1—3—4	Engine oil.
1	Engine oil filter.
1 — 2	Front suspension, steering, and parking brake system.
5	Automatic transmission fluid.
1	Engine air cleaner element.
2	Front wheel bearings.
2	Manual transmission, drive line joints and rear axle.

If at any time it is considered that the above items or other items should be more frequently serviced due to the type of operation or before a long trip, discuss the situation with the service manager of your GMH Dealer.

Maintenance Plan

The 3-Step Service Concept

The fundamental points are:

1. A basic service interval period of 6 months or 10,000 kilometres whichever occurs first.
2. A "step" principle of 3 correlated services.
3. The frequency of these services is:

   "A" service items — Serviced every 6 months or 10,000 km
   "B" service items — Serviced every 12 months or 20,000 km
   "C" service items — Serviced every 24 months or 40,000 km

Service Designation	—A—	—B—	—C—
Items	Group I	Groups I & II	Groups I, II & III

Up to the 3rd step in the items programmed in the earlier steps are included.

The total time/distance range of this Maintenance Schedule is 66 months or 110,000 kilometres.

Total Programme

Pre-Delivery Service

1 Month — 1500 Kilometres
Inspection and Adjustment

Then as required: (Months — km)

A @ 6-10,000
B @ 12-20,000
A @ 18-30,000
C @ 24-40,000
A @ 30-50,000
B @ 36-60,000
A @ 42-70,000
C @ 48-80,000
A @ 54-90,000
B @ 60-100,000
A @ 66-110,000

Maintenance

Once the first service has been completed, dependability and performance are influenced by the degree of maintenance the vehicle receives.

Safety, economy and dependability cannot be assured unless regular maintenance is performed, preferably by factory-trained technicians. It is preferable to receive these services from the Dealer from whom the vehicle was purchased. However, Maintenance will be attended to by any Authorised GMH Dealer on presentation of the Owner Handbook, no matter where you may be situated.

The one month—1500 kilometre service will be performed without cost for labour by the Selling Dealer.

This service may be carried out by another GMH Dealer provided you have a letter of Introduction from the Selling Dealer. Your Dealer will supply the necessary letter of Introduction upon request.

What The Owner Should Do

When service, according to the time or distance interval, is due, the owner should present this Owner Handbook to a GMH Dealer as an authority to have the items listed attended to. After this work is completed, the owner should see that the Validation Record is stamped and signed by the Dealer. The Handbook with the Validations completed is evidence that a vehicle has been adequately maintained . This is important as it will not only assist in the determination of Warranty Claims, but enhance the value of the vehicle whenever resale is contemplated.

What The Servicing Dealer Has To Do

Attend to all items listed for the particular service. When this has been done, it is most important that the owner Handbook Validation be signed by the Dealer or his representative.

All operations listed on the Service Coupons should be carried out following the procedures set out in the appropriate service manual.

Maintenance Plan

Group I Under Hood Operations
Change engine oil.
Check all fluid levels accessible in engine compartment, e.g. brake coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
Wipe inside of distributor cap.
Check operation of Early Fuel Evaporation (EFE) system.
Inspect engine air cleaner element for restriction and condition. Replace if necessary. (6 Cyl. Heavy Duty Units—rinse foam element, dry, re-oil then replace.)
Check air pre-heat control damper assembly for correct cold and hot operation.
Check operation of idle stop solenoid.
Check automatic choke for free operation.
First "A" Service Only. Check torque of carburettor mounting bolts. Check operation of EGR valve, where fitted.
Clean radiator core—check for blockages.
Drain and refill cooling system and recharge with inhibitor.
First "A" Service Only.* Air Conditioning Only.
Check and if necessary adjust compressor drive belt using gauge. Check compressor mounting bolts for tightness. Inspect refrigerant hose connections for evidence of leaks, correct if necessary. Check refrigerant charge at sight glass. Check that blower operates on each speed setting. Check operation of auxiliary cooling fan.
All "A" Services after the first.* Check sight glass for sufficient R-12 charge.

Group I Under Vehicle Operations
Change engine oil filter.
Manual Transmission Only. Check oil level.
Check rear axle oil level.
Inspect and lubricate front suspension and steering joints.
Lubricate transmission shift and clutch linkages as applicable.
Check parking brake operation and lubricate system. Adjust if necessary.
Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage—brake and fuel lines, shock absorbers and mountings.
Inspect engine and transmission mountings.
Check and adjust clutch control pedal height.
Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
Inspect disc brake pads for wear.

Group I Interior Vehicle Operations
Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

Group I Exterior Vehicle Operations
Lubricate door handle pivots, door hinges, striker bolts or plates and hood lock and catch as required.
Check vehicle on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

Maintenance Plan

Group II Under Hood Operations
Lubricate distributor. Check condition of cap and rotor. Check TVRS cables for resistance. Replace spark plugs. Check ignition timing.
EGR System Only. Clean valve and manifold opening.
Auto Choke. Check and adjust if necessary settings.
Check ignition timing, engine idle speed and fast idle speed on choke cam. Adjust if necessary.
Serviceable PCV Valves—Dismantle, clean and re-assemble. Disposable PCV Valves—Test and replace if necessary.
Clean PCV intake filter located in air cleaner cover.
Clean or replace fuel filter as necessary.
Drain and refill cooling system. Add specified quantity of inhibitor.
Air Conditioning Only.* Inspect condenser to ensure that it is not plugged with leaves or other foreign material. Check evaporator drain tube for dirt and other restrictions. Inspect flexible hose lines for leaks and brittleness.

Group II Under Vehicle Operations
Inspect rear brake linings and drums for wear. Wipe off dust. Check self-adjusting mechanism and parking brake adjustment.
Inspect front wheel bearings and check adjustment. Repack only if necessary.
Check steering box. Adjust if necessary.*
Check operation of transmission shift linkage. Adjust if necessary.

Group III Under Hood Operations
Replace air cleaner element if not yet changed in previous 24/40 period.
L6 engines, clean fuel pump valve housing.
Replace PCV intake filter.
Evaporative control system. Check all fuel and vapour lines and hoses for proper connections and correct routing as well as condition. Remove cannister and check for cracks or damage. Replace damaged or deteriorated parts as necessary. Replace filter.

Group III Under Vehicle Operations
Repack front wheel bearings.
Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
Auto Transmission Only. Drain and refill fluid. Trimatic—Adjust band and clean filter.

Additional Service—refer page 129.

N.B. It should be understood that whenever a B or C service is being carried out, some items on an earlier operation, may be superseded or modified by a later operation.

New Vehicle Preparation Validation

Your new vehicle has been inspected and prepared for delivery by your Dealer, in accordance with the manufacturer's New Vehicle Pre-Delivery Procedures.

Service Manager's Signature.....

Date.....P.T.O.

Pre-Delivery Operations

Check, and adjust if necessary, the following items:

Under Hood operations
Oil levels of engine, auto trans, brake master cylinders, power steering pump (if fitted) and Battery Electrolyte level.
Hose connections, fill radiator and windshield washer reservoir. Ensure corrosion inhibitor is present in radiator.
Air filter element.
Air Conditioning. Check and if necessary adjust compressor drive belt using gauge. Check compressor mounting bolts for tightness. Inspect refrigerant hose connections for evidence of leaks, correct if necessary. Check refrigerant charge at sight glass. Check that blower operates on each speed setting. Check operation of auxiliary cooling fan.

Under Vehicle Operations
Oil, fuel, water and exhaust leaks.
Lubrication and operation of steering gear from lock to lock, if excessive free travel evident, adjust steering.
Oil levels in transmission and rear axle.
Brake line connections—check hoses for correct clearance.
Brakes—foot and park.
Inspect tyres and inflate to recommended pressures. Check toe-in.
Tighten wheel nuts to specified torque.

Interior of Vehicle
Operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls.
Neutral safety switch and transmission parking pawl. (Auto transmission.)
Heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
Operation of all lights, including turn signals and hazard warning; C/A headlamp aim.
Inspect body trim and instrument panel; touch-up paint as necessary.
Fit of floor mats and completely clean the interior of the vehicle.

Exterior of Vehicle
Wash vehicle, check paint, brush touch-up and minor repair as necessary and polish.

Road Test
Operation of seat belt emergency locking retractors.
Road test for engine, braking, and steering performance, operation of Air Conditioning (where fitted), rattles and squeaks, **and correct if necessary.**
Steering wheel spoke position.
Vehicles fitted with Automatic Transmission—check shift pattern. Manual Transmission—check gear shift operation.
Clean steering wheel and control levers.
Check Tool and Jack stowage.

Mechanic's Signature..... Date.....

Delivery Certificate

The dealer has completed the vehicle identification certificate, and has explained to the purchaser the terms and conditions of the General Motors-Holden's Sales Pty. Ltd., new vehicle warranty and notices and the contents of the owner's handbook. The dealer has informed the purchaser of his responsibility in respect of vehicle maintenance.

The dealer has demonstrated to the purchaser the operation of the vehicle and of all options and accessories.

The purchaser has been informed in writing of the fitting of any and all equipment or accessories not marketed by GMH or an affiliated company, and of any alterations or modifications which have been made to the vehicle and the effect on the GMH sales new vehicle warranty of such fitting, alteration or modification.

The purchaser has inspected the vehicle and acknowledges its delivery in accordance with this delivery procedure.

Purchaser's Signature ..... Date .....

Delivered by: Signature ..... Date .....

Owner's Name Mr. Mrs. Miss .....

Address .....

Town & State ..... Postcode .....

Reg. No. ..... Model Name .....

V.I.N. ..... Eng. No. .....

1 Month — 1500 Kilometre Inspection & Adjustment

This coupon should not be removed until the vehicle is presented for service.

Owner's Name Mr. Mrs. Miss .....

Address .....

Town & State ..... Postcode .....

Reg. No. ..... Model Name .....

V.I.N. ..... Eng. No. .....

Selling Dealer's Stamp & Signature .....

Date of Acquisition .....

This vehicle has been thoroughly checked in accordance with the schedule on the reverse side of this coupon.

Servicing Dealer .....

Town ..... State .....

Owner's Signature .....

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1 Month — 1500 Kilometre

This vehicle has been thoroughly checked in accordance with the 1 month — 1,500 kilometre inspection and adjustment.

Dealer .....

Service Manager's Signature .....

Date ..... Odometer Reading .....

1 Month — 1500 Kilometre Inspection and Adjustment

Under Hood Operations
Check Engine Oil Level.
Check all Fluid Levels accessible in Engine Compartment.
Check Air Cleaner Element for Restriction under Extreme Dusty conditions.
Check all Hose Clips in Engine Compartment. (Use Torque Wrench where applicable.)
Check Ignition Timing, Engine Idle Speed and Fast Idle Speed on Choke Cam. Adjust if necessary.
Check operation of Early Fuel Evaporation (EFE) System for correct operation.
Check Condition and Tension of all engine Drive Belts—using Tension Gauge.
Check and Adjust Hood Lock and Safety Catch and Lubricate.

Under Vehicle Operations
Lubricate Front Suspension, (Ball and Steering Joints—where applicable).
Check Transmission and Rear Axle Oil levels.
Inspect all Brake Line Connections and Hoses for Leakage and Clearance.
Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
Check Steering Connections.
(Manual Transmission Only) Check and Adjust Clutch Control Pedal Height.

Interior Vehicle Operations
Check operation of Instruments, Lights, Hazard Warning, Turn Signals, Horn, Windshield Wipers and Washers, Seat Belts, Seat Adjustment Mechanisms and Mirrors.
Check Operation of Parking Brake.

Exterior Vehicle Operations
Check Headlamp Aim, Adjust if necessary.
Check Door Lock Operation, Striker Plates, Handles, etc. and Lubricate.

Road Test Programme
All Rattles, Squeaks, Vibrations and Noises should be checked and rectified.
Check vehicle on the road for even braking and steering, transmission operation, engine response and parking brake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

This Inspection and Adjustment will be carried out without charge to the owner except for any lubricants used. The Designated Servicing Programme is not to be exceeded without the Owner's prior agreement to additional servicing charges.

6 Months or 10,000 km

Dealer .....

Date .....

Odometer .....

Signed .....

A SERVICE

6 Months — 10,000 Kilometre Service

	Under Hood Operations
	Change engine oil.
	Check all fluid levels accessible in engine compartment, e.g. brake, coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
*	V8 Engines Only— Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Wipe inside of distributor cap.
	Check operation of exhaust heat manifold valve for free operation.
	Inspect engine air cleaner element for restriction and condition. Replace if necessary after testing. (6 Cyl. Heavy Duty Units — rinse foam element, dry, re-oil then replace.)
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Check automatic choke for free operation.
	Check torque of carburettor mounting bolts. Check operation of EGR valve, where fitted.
	Clean radiator core — check for blockages.
	Drain and refill cooling system and recharge with inhibitor.
*	Air conditioning. Check and if necessary adjust compressor drive belt using gauge.
	Check compressor mounting bolts for tightness. Inspect refrigerant hose connections for evidence of leaks, correct if necessary. Check refrigerant charge at sight glass. Check that blower operates on each speed setting. Check operation of auxiliary cooling fan.
	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage — brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmission Only— Check and adjust clutch fork operating rod free travel.
	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.

A Service

	Interior Vehicle Operations
	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

	Exterior Vehicle Operations
	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and park brake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

**Additional Service—refer page 129.*

B SERVICE

12 Months or 20,000 km

Dealer .....

Date .....

Odometer .....

Signed .....

12 Months — 20,000 Kilometre Service

	Under Hood Operations
	Change engine oil.
	Check all fluid levels accessible in engine compartment, e.g. brake coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
*	V8 Engines Only— Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Lubricate distributor. Check condition of cap and rotor. Wipe inside of distributor cap. Check TVRS cables for resistance. Replace spark plugs.
	EGR System Only— Clean valve and manifold opening.
	Check operation of exhaust heat manifold valve for free operation.
	Inspect engine air cleaner element for restriction and condition. Replace if necessary after testing. (6 Cyl. Heavy Duty Units — rinse foam element, dry, re-oil then replace.)
	Clean PCV intake filter located in air cleaner cover.
	Auto Choke ▲ Check and adjust if necessary settings. Check and adjust if necessary fast idle speed on choke cam. Check choke for free operation.
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Serviceable PCV Valves — Dismantle, clean and re-assemble. Disposable PCV Valves — Test and replace if necessary.
	Clean or replace fuel filter as necessary.
	Drain and refill cooling system. Add specified quantity of inhibitor. Clean radiator core — check for blockages.
*	Air Conditioning Only— Inspect condenser to ensure that it is not plugged with leaves or other foreign material. Check evaporator drain tube for dirt and other restrictions. Inspect flexible hose lines for leaks and brittleness. Check sight glass for sufficient R-12 charge.

	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.

	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage — brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmission Only— Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.
	Inspect rear brake linings and drums for wear. Wipe off dust. Check self-adjusting mechanism and parking brake adjustment.
	Inspect front wheel bearings and check adjustment. Repack only if necessary.
	Check steering box and adjust if necessary.
	Interior Vehicle Operations
	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

	Exterior Vehicle Operations
	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

**Additional Service—refer page 129.*

18 Months or 30,000 km

Dealer .....

Date .....

Odometer .....

Signed .....

A SERVICE

18 Months — 30,000 Kilometre Service

	Under Hood Operations
	Change engine oil.
	Check all fluid levels accessible in engine compartment, e.g. brake, coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
	V8 Engines Only— Check operation of vapour separator where fitted.
	Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Wipe inside of distributor cap.
	Check operation of exhaust heat manifold valve for free operation.
	Inspect engine air cleaner element for restriction and condition. Replace if necessary after testing. (6 Cyl. Heavy Duty Units — rinse foam element, dry, re-oil then replace.)
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Check automatic choke for free operation.
	Clean radiator core — check for blockages.
	Drain and refill cooling system and recharge with inhibitor.

*	Air Conditioning Only— Check sight glass for sufficient R-12 Charge.

	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage — brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmission Only— Check and adjust clutch fork operating rod free travel.
	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.

P.T.O.

Interior Vehicle Operations	
	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

Exterior Vehicle Operations	
	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

**Additional Service—refer page 129.*

24 Months — 40,000 Kilometre Service

	Under Hood Operations
	Change engine oil.
	Check all fluid levels accessible in engine compartment, e.g. brake coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
*	V8 Engines Only— Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Lubricate distributor. Check condition of cap and rotor. Wipe inside of distributor cap. Check TVRS cables for resistance. Replace spark plugs.
	EGR System Only— Clean valve and manifold opening.
	Check operation of exhaust heat manifold valve for free operation.
	Replace air cleaner element if not yet changed in previous 24/40 period. (6 Cyl. Heavy Duty Units — rinse foam element, dry, re-oil then replace.)
	Replace PCV intake filter located in air cleaner cover.
	Auto Choke Check and adjust if necessary settings. Check and adjust if necessary fast idle speed on choke cam. Check choke for free operation.
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Check and adjust if necessary engine idle speed.
	Serviceable PCV Valves — Dismantle, clean and re-assemble. Disposable PCV Valves — Test and replace if necessary.
	Clean or replace fuel filter as necessary.
	Drain and refill cooling system. Add specified quantity of inhibitor. Clean radiator core — check for blockages.
*	Air Conditioning Only— Inspect condenser to ensure that it is not plugged with leaves or other foreign material. Check evaporator drain tube for dirt and other restrictions. Inspect flexible hose lines for leaks and brittleness. Check sight glass for sufficient R-12 charge.
	Evaporative control system. Check all fuel and vapour lines and hoses for proper connections and correct routing as well as condition. Remove canister and check for cracks or damage. Replace damaged or deteriorated parts as necessary. Replace filter.

	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.

P.T.O.

	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage — brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmission Only— Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.
	Inspect rear brake linings and drums for wear. Wipe off dust. Check self-adjusting mechanism and parking brake adjustment.
	Repack front wheel bearings.
	Drain, flush and refill with recommended new brake fluid from a sealed container.
	Check steering box and adjust if necessary.
*	Auto Transmission Only— Drain and refill fluid. Trimatic — Adjust band and clean filter.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

Additional Service—refer page 129.

30 Months — 50,000 Kilometre Service

30 Months or 50,000 km

Dealer .....

Date .....

Odometer .....

Signed .....

A SERVICE

	Under Hood Operations
	Change engine oil.
	Check all fluid levels accessible in engine compartment, e.g. brake, coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
*	V8 Engines Only— Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Wipe inside of distributor cap.
	Check operation of exhaust heat manifold valve for free operation.
	Inspect engine air cleaner element for restriction and condition. Replace if necessary after testing. (6 Cyl. Heavy Duty Units — rinse foam element, dry, re-oil then replace.)
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Check automatic choke for free operation.
	Clean radiator core — check for blockages.
	Drain and refill cooling system and recharge with inhibitor.
*	Air Conditioning Only— Check sight glass for sufficient R-12 Charge.

	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage — brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmission Only— Check and adjust clutch fork operating rod free travel.
	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.

P.T.O.

Interior Vehicle Operations	
	Check all fluid levels accessible in engine compartment, e.g. coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

Exterior Vehicle Operations	
	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

**Additional Service—refer page 129.*

B SERVICE

36 Months or 60,000 km

Dealer .....

Date .....

Odometer .....

Signed .....

36 Months — 60,000 Kilometre Service

	Under Hood Operations
	Change engine oil
	Check all fluid levels accessible in engine compartment, e.g. brake coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
*	V8 Engines Only— Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Lubricate distributor. Check condition of cap and rotor. Wipe inside of distributor cap. Check TVRS cables for resistance. Replace spark.
	EGR System Only— Clean valve and manifold opening.
	Check operation of exhaust heat manifold valve for free operation.
	Inspect engine air cleaner element for restriction and condition. Replace if necessary after testing. (6 Cyl. Heavy Duty Units — rinse foam element, dry, re-oil then replace.)
	Clean PCV intake filter located in air cleaner cover.
	Auto Choke Check and adjust if necessary settings. Check and adjust if necessary fast idle speed on choke cam. Check choke for free operation.
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Check and adjust if necessary engine idle speed.
	Serviceable PCV Valves — Dismantle, clean and reassemble. Disposable PCV Valves — Test and replace if necessary.
	Clean or replace fuel filter as necessary.
	Drain and refill cooling system. Add specified quantity of inhibitor. Clean radiator core — check for blockages.
*	Air Conditioning Only— Inspect condenser to ensure that it is not plugged with leaves or other foreign material. Check evaporator drain tube for dirt and other restrictions. Inspect flexible hose lines for leaks and brittleness. Check sight glass for sufficient R-12 charge.

	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.

P.T.O.

	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage — brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmisssion Only— Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.
	Inspect rear brake linings and drums for wear. Wipe off dust. Check self-adjusting mechanism and parking brake adjustment.
	Inspect front wheel bearings and check adjustment. Repack only if necessary.
	Check steering box and adjust if necessary.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehilce on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

**Additional Service—refer page 129.*

Dealer .....

Date .....

Odometer .....

Signed .....

42 Months — 70,000 Kilometre Service

	Under Hood Operations
	Change engine oil.
	Check all fluid levels accessible in engine compartment, e.g. brake, coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
*	V8 Engines Only— Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Wipe inside of distributor cap.
	Check operation of exhaust heat manifold valve for free operation.
	Inspect engine air cleaner element for restriction and condition. Replace if necessary after testing. (6 Cyl. Heavy Duty Units—rinse foam element, dry, re-oil then replace.)
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Check automatic choke for free operation.
	Check torque of carburettor mounting bolts. Check operation of EGR valve, where fitted.
	Clean radiator core—check for blockages.
	Drain and refill cooling system and recharge with inhibitor.
*	Air Conditioning Only— Repeat pre-delivery check as outlined in the HQ Service Manual, Air Conditioning Section, Page 33.

	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage—brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmission Only— Check and adjust clutch fork operating rod free travel.
	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.

P.T.O.

	Interior Vehicle Operations
	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and rectractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

	Exterior Vehicle Operations
	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

*Additional Service—refer page 129.

48 Months or 80,000 km

Dealer .....

Date .....

Odometer .....

Signed .....

C SERVICE

48 Months — 80,000 Kilometre Service

	Under Hood Operations
	Change engine oil.
	Check all fluid levels accessible in engine compartment, e.g. brake coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
*	V8 engines Only— Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Lubricate distributor. Check condition of cap and rotor. Wipe inside of distributor cap. Check TVRS cables for resistance. Replace spark
	EGR System Only— Clean valve and manifold opening.
	Check operation of exhaust heat manifold valve for free operation.
	Replace air cleaner element if not yet changed in previous 24/40 period. (6 Cyl. Heavy Duty Units—rinse foam element, dry, re-oil then replace.)
*	Replace PCV intake filter located in air cleaner cover.
	Auto Choke Check and adjust if necessary settings. Check and adjust if necessary fast idle speed on choke cam. Check choke for free operation.
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Check and adjust if necessary engine idle speed.
	Serviceable PCV Valves—Dismantle, clean and re-assemble. Disposable PCV Valves—Test and replace if necessary.
	Clean or replace fuel filter as necessary.
	Drain and refill cooling system. Add specified quantity of inhibitor. Clean radiator core—check for blockages.
*	Air Conditioning Only— Inspect condenser to ensure that it is not plugged with leaves or other foreign material. Check evaporator drain tube for dirt and other restrictions. Inspect flexible hose lines for leaks and brittleness. Check sight glass for sufficient R-12 charge.
	Evaporative control system. Check all fuel and vapour lines and hoses for proper connections and correct routing as well as condition. Remove canister and check for cracks or damage. Replace damaged or deteriorated parts as necessary. Replace filter.

	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.

Service

	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage—brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmission Only— Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.
	Inspect rear brake linings and drums for wear. Wipe off dust. Check self-adjusting mechanism and parking brake adjustment.
	Repack front wheel bearings.
	Check steering box and adjust if necessary.
*	Auto Transmission Only— Drain and refill fluid. Trimatic—Adjust band and clean filter.

Interior Vehicle Operations	
	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

Exterior Vehicle Operations	
	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

Additional Service—refer page 129.

54 Months or 90,000 km

Dealer .....

Date .....

Odometer .....

Signed .....

A SERVICE

54 Months — 90,000 Kilometre Service

	Under Hood Operations
	Change engine oil.
	Check all fluid levels accessible in engine compartment, e.g. brake, coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
*	V8 Engines Only— Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Wipe inside of distributor cap.
	Check operation of exhaust heat manifold valve for free operation.
	Inspect engine air cleaner element for restriction and condition. Replace if necessary after testing. (6 Cyl. Heavy Duty Units—rinse foam element, dry, re-oil then replace.)
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Check automatic choke for free operation.
	Check torque of carburettor mounting bolts. Check operation of EGR valve, where fitted.
	Clean radiator core—check for blockages.
	Drain and refill cooling system and recharge with inhibitor. with inhibitor.
*	Air Conditioning Only— Repeat pre-delivery check as outlined in the HQ Service Manual, Air Conditioning Section, Page 33.

	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage—brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmission Only— Check and adjust clutch fork operating rod free travel.
	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.

P.T.O.

	Interior Vehicle Operations
	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

	Exterior Vehicle Operations
	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

**Additional Service—refer page 129.*

B SERVICE

60 Months or 100,000 km

Dealer .....

Date .....

Odometer .....

Signed .....

60 Months — 100,000 Kilometre Service

	Under Hood Operations
	Change engine oil.
	Check all fluid levels accessible in engine compartment, e.g. brake coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
*	V8 Engines Only— Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Lubricate distributor. Check condition of cap and rotor. Wipe inside of distributor cap. Check TVRS cables for resistance. Replace spark
	EGR System Only— Clean valve and manifold opening.
	Check operation of exhaust heat manifold valve for free operation.
	Inspect engine air cleaner element for restriction and condition. Replace if necessary after testing. (6 Cyl. Heavy Duty Units — rinse foam element, dry, re-oil then replace.)
	Clean PCV intake filter located in air cleaner cover.
	Auto Choke Check and adjust if necessary settings. Check and adjust if necessary fast idle speed on choke cam. Check choke for free operation.
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Check and adjust if necessary engine idle speed.
	Serviceable PCV Valves — Dismantle, clean and reassemble. Disposable PCV Valves — Test and replace if necessary.
	Clean or replace fuel filter as necessary.
	Drain and refill cooling system. Add specified quantity of inhibitor. Clean radiator core — check for blockages.
*	Air Conditioning Only— Inspect condenser to ensure that it is not plugged with leaves or other foreign material. Check evaporator drain tube for dirt and other restrictions. Inspect flexible hose lines for leaks and brittleness. Check sight glass for sufficient R-12 charge.

	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.
	Inspect steering gear, linkage and dust covers for wear and security. Notify owner of any deficiencies, including loss of steering preload, for immediate rectification.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.

	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage — brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmission Only— Check and adjust clutch fork operating rod free travel.
	Check operation of transmission shift linkage. Adjust if necessary.
	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.
	Inspect rear brake linings and drums for wear. Wipe off dust. Check self-adjusting mechanism and parking brake adjustment.
	Inspect front wheel bearings and check adjustment. Repack only if necessary.
	Check steering box and adjust if necessary.

Interior Vehicle Operations

	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

Exterior Vehicle Operations

	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

*Additional Service—refer page 129.

66 Months or 110,000 km

Dealer .....

Date .....

Odometer .....

Signed .....

A SERVICE

66 Months — 110,000 Kilometre Service

	Under Hood Operations
	Change engine oil.
	Check all fluid levels accessible in engine compartment, e.g. brake, coolant, washer, battery electrolyte, auto transmission, power steering reservoir.
	Inspect condition and adjust tension of all engine drive belts. Adjust if necessary using gauge.
	Inspect condition and attachment of all hoses in engine compartment, including all emission systems pipes and connections.
*	V8 Engines Only— Check operation of vapour separator where fitted.
	L6 Engines Only— Clean fuel pump sediment bowl.
	Wipe inside of distributor cap.
	Check operation of exhaust heat manifold valve for free operation.
	Inspect engine air cleaner element for restriction and condition. Replace if necessary after testing. (6 Cyl. Heavy Duty Units — rinse foam element, dry, re-oil then replace.)
	Check air pre-heat control damper assembly for correct cold and hot operation.
	Check operation and setting of idle stop solenoid.
	Check automatic choke for free operation.
	Check torque of carburettor mounting bolts. Check operation of EGR valve, where fitted.
	Clean radiator core — check for blockages.
	Drain and refill cooling system and recharge with inhibitor.
	Air Conditioning Only— Repeat pre-delivery check as outlined in the HQ Service Manual, Air Conditioning Section, Page 33.

	Under Vehicle Operations
	Change engine oil filter.
	Manual Transmission Only— Check oil level.
	Check rear axle oil level.
	Inspect and lubricate front suspension and steering joints.
	Lubricate accelerator, transmission shift and clutch linkages as applicable.
	Check parking brake operation and lubricate system. Adjust if necessary.
	Inspect exhaust system and adjacent body areas for open seams or damage. Inspect for leaks and damage — brake and fuel lines, shock absorbers and mountings.
	Inspect engine and transmission mountings.
	Manual Transmission Only— Check and adjust clutch fork operating rod free travel.
*	Inspect tyres for irregular wear or damage and advise owner, if necessary, of any corrective maintenance required. Check inflation pressures and torque wheel nuts.
	Inspect disc brake pads for wear.

P.T.O.

	Interior Vehicle Operations
	Check operation of all warning indicators, ignition steering lock, brake and park brake lights and interior electrical system items and controls. Check all internal lights.
	Check heating, ventilation and demisting system ducts are clear and operation is satisfactory and controls correctly adjusted.
	Seat belt inspection. Examine webbing condition, buckle operation and retractor mechanism function. Notify owner of any deficiencies observed for immediate rectification.

	Exterior Vehicle Operations
	Lubricate door handle pivots, door hinges, striker bolts or plates, hood lock and catch and luggage compartment lock or end-gate regulator as required.
	Check vehicle on the road for even braking and steering, transmission operation, engine response and handbrake operation. Check mirrors, seat adjustment and automatic transmission shift pattern.

**Additional Service—refer page 129.*

Suggested Labour Times

For Work Performed during Maintenance Services

"A" SERVICE — BASIC SERVICE TIME — 1.6 HR.
"B" SERVICE — BASIC SERVICE TIME — 2.5 HR.
"C" SERVICE — BASIC SERVICE TIME — 3.8 HR.

THE OWNER WILL BE CHARGED FOR LUBRICATIONS AND MATERIALS USED PLUS LABOUR.
AT THE TIMES RECOMMENDED ABOVE.

ADDITIONS TO BASIC SERVICE

The service times above are for service to a basic vehicle.

Additional time and material required for servicing optional equipment fitted to a basic vehicle must be added to the suggested labour time and charges.

The repairing or replacing of any part found faulty during a service check and not covered by GMH Warranty will be added to the charges.

WHERE ANY DEFICIENCIES ARE NOTED SUCH ITEMS SHOULD BE REPORTED TO THE OWNER/OPERATOR SO THAT THE EXTRA WORK REQUIRED CAN BE AUTHORISED.

*ADDITIONAL SERVICES & TIMES WHERE APPLICABLE

FIRST "A" SERVICE	0.2 HR.
V8 ENGINE TUNE-UP — "B" SERVICE	0.5 HR.
AIR CONDITIONING — 1st "A" SERVICE	0.1 HR.
AIR CONDITIONING INSPECTION	0.1 HR.
AUTO TRANSMISSION — "C" SERVICE — TRI-MATIC	0.6 HR.
EGR SYSTEM CHECK — "B" SERVICE	0.2 HR.
FRONT WHEEL BEARING REPACK — "B" SERVICE	0.5 HR.
REAR DISC PARKING BRAKE INSPECTION — "A" SERVICE	0.2 HR.
PARKING BRAKE INSPECTION "C" SERVICE	0.6 HR.

INDEX

A

Accelerator Pedal 25
Air Cleaner 91
Air Conditioning 34-35
Anti-Freeze Fluid 89
Anti-Theft Ignition Steering Lock 17
Appearance Care
Paint and Appearance Items 75
—Vehicle Cleaning Tips 75
—Cleaning of Interior 76-77
—Cleaning of Exterior 77-79
Ash Tray Cleaning 77
Automatic Transmission
—Operation 22-23
—Maintenance 77
—Fluid Capacity 70

B

Back-Up Lamp
—Operation 20-23
—Replacement 74
—Specification 73
Battery 91
Bearings Front Wheel 88
Bulb
—Replacement 74
—Specifications 73
Brake
—Operation 24-25
—Warning Park Light 25
—Brake Failure Light 28
—Dual Circuit System 24
—Disc 24
—Power Assisted 24
—Drum 25
—Parking 25
—Master Cylinder 91

C

Capacities 70
Caravan (Trailer) Hauling 41
Carbon Monoxide Warning 6, 15
Carburettor Mixture 70
Carpet Cleaning 76
Chromium Plated Part Cleaning 80
Cigarette Lighter 29
Cleaning of Exterior 77-83
—Insect Spots 83
—Washing 83
—Polishing 81
—Chromium Plated Parts 80
—Paint Work Inspection 80
Cleaning of Interior 76-77
—Care and Cleaning of Upholstery 76
—Cleaning Carpets 76
—Cleaning the Seat Belts 76
—Cleaning of Ash Trays 76
Clearances of Settings 70
Clock 29
Clutch Pedal 25
Controls
—Steering Column 17-19
—Transmission 20-23
—Floor 24-25
—Instrument Panel 26-29
—Ventilation 31
Cooling System 89, 90
—Radiator Pressure Cap 70, 89
—Filling the Cooling System 89
—Draining and Flushing 89
—Corrosion Inhibitor 90
—Anti-Freeze 89
—Capacity 70
Corrosion Inhibitor 90

D

Dealer List 57-65
Delivery Certificate 104
Dimensions (Vehicle) 68
Dipping (Headlamp) 19
Disc Brakes 24
Dome Lamp
—Replacement 76
—Specification 73
Door
—Locks 8
—Drain Holes 78
Drum Brakes 25
Dual Circuit Brake System 24
Dwell Control 29

E

Emission Control Systems 48-53
Emergency Conditions
—Emergency Starting 46-47
—Spare Wheel Storage 37
—Wheel Trim Removal 38
—Wheel Changing 39-41
—Overheating 44
—Towing a Disabled Vehicle 45
Emergency
—Push Starting 46
—Jump Starting 47
Engine
—Fuel Requirements 69, 84
—Initial Oil Fill 82
—Maintaining Oil Level 82
—Oil Consumption 83
—Oil Filter Replacement 84
—Oil Change Intervals 85
—Oil Viscosity Grades 86
—Data 69
—Oil Capacities 70
—Number Prefixes 67
Evaporative Control System 92
Exhaust Gas
—Carbon Monoxide Warning 15

F

Floor Controls
—Brake Operation 24-25
—Brake Warning Light 25
—Dual Circuit Brake System 24
—Disc Brakes 24
—Power Assisted Brakes 24
—Drum Brakes 25
—Parking Brake 25
—Accelerator Pedal 25
—Clutch Pedal 25
Flow Through Ventilation 31-33
Fuel
—Gauge 28
—Requirements 69, 84
—Economy 4
—Tank Capacity 70
Fumes (Petrol) 7
Fuse System 71-72

G

Generator Indicator Light 28
Getting to know your Holden 3
—Safe Driving 6, 7
—Keys and Locks 8, 9
—Rear Vision Mirrors 14
—Running In 3
—Seat Adjustment 13
—Seat Belts 11, 12
—Trailer Hauling 41, 42
Glove Compartment 9
Guardian Maintenance 99-129

H

Hazard Warning Flashers 19
Heater Demister 32-33

Headlamp
—Dipping 19
—Replacement 74
—Specification 73
High Beam Indicator Light 28
Horns 17

I

Identification Certificate IFC
Identification Numbers 67-68
Ignition Steering Lock 17
Indicator Lights 28-29
Insect Spot Cleaning 79
Instruments
—Bulb Replacement 74
—Bulb Specification 73
Instrument Panel 26
—Index 27
—Light Switch 28
—Headlamp Dipping 19
—Radio Power Antenna 29
—Cigarette Lighter 29
—Windshield Wipers and Washers 18

J

Jack 39-40
Jump Starting 47

K

Keys 8

L

Lamps
—Turn Signal 28
—Headlamp High Beam 28
—Light Switch 28
—Bulb Replacement 74
—Bulb Specification 83
Lane Change Indication 18
Lap/Sash Combination Belt 11-12
Licence Plate Lamp
—Replacement 74
—Specification 73
Light
—Indicator 28
—Switch 28
Limited Slip Differential 36
Loading Information 43
Locks (and Keys)
—Keys 8
—Door Lock Operation 8
—Fuel Filler Locking Cap 9
—Anti-Theft Ignition Steering
—Lock 17
—Engine Hood IBC
Lubricants 88

M

Maintenance Certificates 105-128
Maintenance Plan 100-128
Manual Transmission 20-21
Mirrors (Rear Vision) 14
Model Identification 68

O

Odometer 28
Oil
—Pressure Gauge 29
—Pressure Indicator Light 28
—Maintaining Level 82
—Consumption 83
—Filter Replacement 84
—Change Intervals 85
—Viscosity Grades 86
—Transmission Oils 87
Optional Features
—Superlift Shock Absorbers 37
—Limited Slip Differential 37
Overheating 46
Owner Relations 57-58
Owners Responsibility 97

P

Paint Work 80
Parking Brake 25

Parking Lamp
—Replacement 74
—Specification 73
Petrol Fumes 7
Polishing 81
Pre-Delivery Check 103
Power Assisted Brakes 24
Power Steering
—Operation 17
—Maintenance 87
Push Starting 46

R

Radiator Pressure Cap 70, 89
—Overheating 44
Rear Axle
—Limited Slip Differential 36
—Maintenance 87
Rear Vision Mirrors 14
Running In 3

S

Safety Driving Hints
—Check List 5
Seat Adjustment 13
—Head Restraint 13
Seat Belts
—General 11, 12
—Cleaning 12, 77
Serial Numbers 67
Service and Maintenance 82-96
Service Station Information 135, IBC
Shock Absorbers 36
Spark Plug Gap 70
Spare Wheel Storage 37
Specifications
—Serial Numbers 67
—Model Identification 68
—Vehicle Dimensions 68
—Wheel Nut Torques 68
—Vehicle Identification Number 67
—Engine Data 69
—Capacities 70
—Clearances and Settings 70
—Fuse System 71, 72
—Headlamp and Bulb Specifications 73
Speedometer 28
Starting and Driving 16
Starting and Operating
—Exhaust Gas 15
—Steering Column Controls 17-19
—Starting and Driving 16
—Transmission Controls 20-23
—Floor Controls 24-25
—Instrument Panel 26-27
—Instrument Dials 28-29
—Indicator Lights 28-29
—Ventilation systems 30-35
Steering Column Controls
—Anti-Theft Ignition
Steering Lock 17
—Power Steering 17
—Horns 17
—Windshield Wipers/Washers 18
—Wiper Dwell Control 18
—Lane change Indication 18
—Turn Signal Operation 18
—Headlamp Dipping 19
—Hazard Warning 19
Stop/Tail Lamp
—Replacement 74
—Specification 73
Superlift Shock Absorbers 36

T

Tachometer 29
Temperature
—Gauge 28
Towing a Disabled Vehicle 45
Trailer Hauling 41-42
—Towbar Load 42

—Maintenance (Automati Transmission 41
—Running In Period 41
—Electrical Connection 41
—Permissible Operating Loads 42
Transmission Controls
—3 Speed Manual 20
—4 Speed Manual 21
—Automatic 22-23
Turn Signal
—Operation 18
—Indicator Light 28
Turn Signal Lamp
—Replacement 74
—Specification 73
Tyres 93-95

U

Upholstery Cleaning 76

V

Valve Clearances 70
Vehicle Identification Certificate IFC
Vehicle
—Loading Information 43
—Identification Number 68
—Dimensions 68
—Weight chart 43
Ventilation systems
—Explanation of Synbols 30
—Flow-Through System 31
—Heater/Demister 32-33
—Intergrated Air Conditioning 34-35

W

Warning Light
—Brake 28
—Generator 28
—Oil Pressure 28
—Hazard Warning 19
Washing 75, 79
Weight Chart 43
Wheel
—Storage & Replacement 37
Wheel Changing
—Jack 39-40
—Nut Torques 68
Windshield
—Wipers and Washers 18
—Cleanliness 92
—Wiper Blades (Cleaning) 92
—Washer Reservoir 92

IFC—Inside Front Cover
IBC—Inside Back Cover

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Service Station Information

Fuel

The fuel filler is located above and behind the rear wheel arch on the drivers side. A flap conceals the removable cap and a rubber protection ring surrounds the filler recess to prevent paint damage.

This vehicle is designed to operate on a good quality clean fuel of 97 Octane Rating (Super).

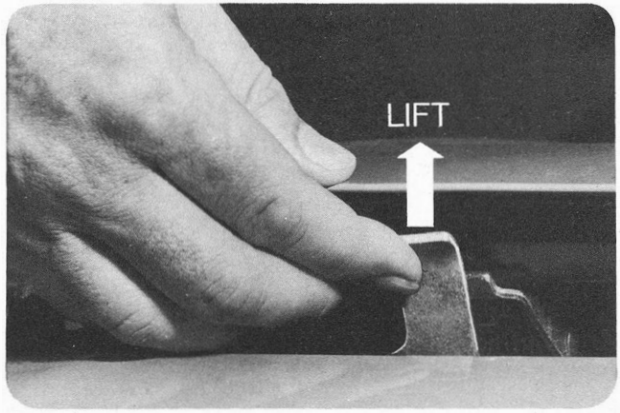
CAUTION: Petrol is extremely inflammable and highly explosive under certain conditions. Always stop the engine and do not smoke or allow open flames or sparks near the vehicle when refuelling. If petrol fumes are noticed while driving, the cause should be determined and corrected without delay.

Filling the Fuel Tank

Overfilling of the fuel tank can affect the evaporative Emission Control System.

To avoid this, the following recommendations are made:

1. Fuel tanks should always be filled at the intermediate or fast fill rate. After initial shut-off (or vent blow back) no further fuel should be added. This retains the tank's ability to accommodate fuel expansion.
2. It is permissible to "trickle fill" fuel tanks where vehicles are to be driven for a distance of at least 50 km shortly after the tank is filled.



Engine Hood Lock and Catch

The hood lock is operated in two steps by means of a release lever or handle and a separate safety catch. To open the engine hood, pull hood lock release handle located beneath the instrument panel, to the right of the steering column. This allows the hood to release but is prevented from opening by the safety catch. To open completely, reach in between the grille and hood to lift safety catch upward. Hold in this position, raise hood and support by inserting support rod into the provided slot. For closing, return support rod to its resting position and lower hood gradually to be finally dropped by its own weight.

Always check to make certain hood is properly secured. If necessary check that release handle below the instrument panel is pushed-in to its normal position.

Battery

Check electrolyte fluid level weekly. If the fluid level is low, add distilled water to bring level to approximately 1 cm above the plates. (Refer to page 91 for additional information.)

Engine Coolant Level

The vehicle has a coolant recovery bottle as standard equipment. Topping up the fluid should be carried out by filling the bottle to the correct level as indicated on the bottle, with the appropriate coolant solution, see pages 89 and 90.

Maintain the level above the ADD mark on the coolant recovery bottle.

Engine Oil Dipstick

Check the oil level as the last operation when stopped for fuel. Maintain oil level between ADD and FULL marks on the dipstick. (Refer to Section 6.)

Windshield Washer

Check reservoir fluid level weekly. Use a washer fluid additive such as Optikleen. (Refer to page 92 for further notes.)

Tyre Pressures

Check pressures at least weekly and adjust as needed. Refer to page 93 and to the Tyre Placard located on the inside of the instrument panel compartment.

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